



Public Health  
England

# Annexe: Healthier weight. Ministry of Defence insights to tackling a national challenge

## The Defence Occupational Fitness ('DOfit') Programme



Ministry  
of Defence



**DO**fit

Defence Occupational  
Fitness Programme

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# DOfit programme training and feedback

This Annexe accompanies the report 'Healthier weight. Ministry of Defence (MOD) insights to tackling a national challenge: The Defence Occupational Fitness ('DOfit') Programme' main report.

It contains supplementary information about the Defence Health and Wellbeing Adviser (DHWA) training and the DOfit programme.

**Section 1**, shows the Conceptual Framework for the DOfit programme shown in **Figure 1**.

**Sections 2-3** provides supplementary information for the DHWA training and includes the training schedule (**Table 1**); duration of the course (**Table 2**) and DHWA tasks (**Table 3**). **Tables 4 and 5** provide information on assessment criteria, namely, marking criteria for tasks to assess competency and marking criteria for reports and reflections.

**Section 4**, progresses onto information on the DOfit programme. The timetable for the programme is available in **Table 6**.

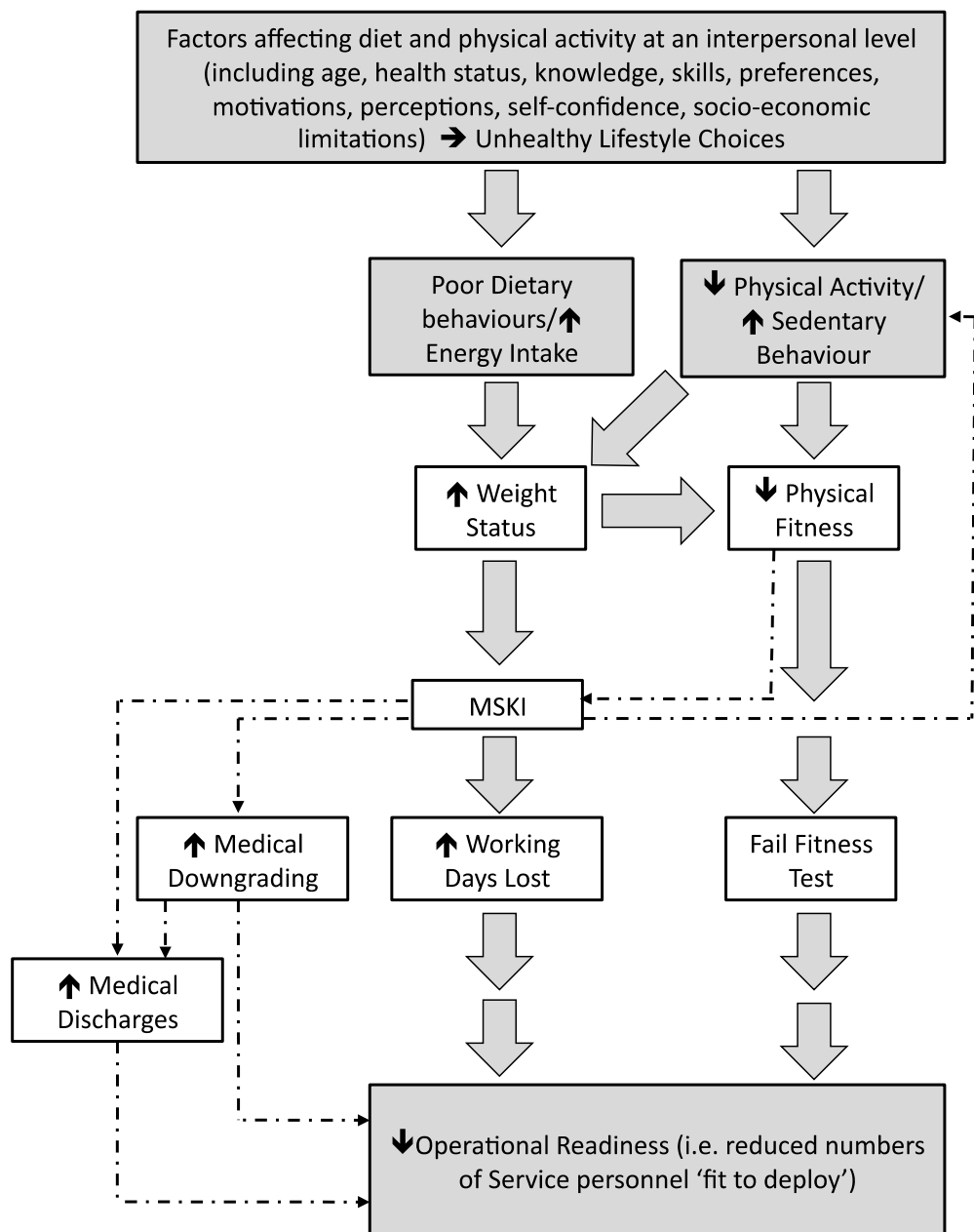
**Sections 5-7** shows the resources used for collating feedback from DOfit participants, DHWA deliverers and leaders to enable the programme to be improved. Resources available: DOfit participants and DHWAs focus group question proforma (**Table 7**); DOfit participant case study proforma and senior leader interview questions proforma (**Table 8**). **Sections 9-11** provides a summary of the feedback collated from DOfit participants as well as case study data and interviews provided by leaders within the military.

The RE-AIM evaluation framework (1) and how this was applied to the DOfit programme is shown in **Table 9 (section 8)**.

A conceptual model on a digital solution to support programme governance and assurance, titled, Wearable Integrated Lifestyle Management Application (WILMA), is shown in **section 12 (Figure 2)**

# 1. DOfit programme conceptual framework

Figure 1: DOfit programme conceptual framework



## 2. Defence Health and Wellbeing Adviser training

Table 1: The defence health and wellbeing adviser (DHWA) training schedule

Day	Morning			Lunch	Afternoon			Evening	
<b>Pre-course</b>	DHWA course introduction								
<b>1</b>	Best practice weight management interventions: Principles of diet and physical activity (PA)		Understanding weight bias in Defence	Understanding behaviour		Influencing behaviour change	How much energy do you need?	AFWM policy, Body Composition Measurement (BCM) and models of delivery	Evening tasks (to discuss the learning from day 1 with other learners)
<b>2</b>	Review	Benefits of PA	Motivational interviewing (MI) in practice	How much energy do you consume? Assessing dietary quality		Aging and nutrition	Nutrition facts and myths and dietary supplements		Evening tasks (to discuss the learning from day 2 with other learners)
<b>3</b>	Review	Evaluating evidence	Understanding health behaviour complexity: smoking and alcohol	Exploring eating styles and relapse		Review evening tasks from days 1 and 2	MI in action	Review tasks; Q&A; Association for Nutrition (AfN) portfolio; course close	

## 3. DHWA course outline

### Background

The DHWA training was originally developed for experienced high performing physical development staff from the Army, Royal Air Force (RAF) and Royal Navy (RN). This training course was accredited by the AfN as a level-4 nutrition qualification in March 2017. The qualification is achieved on successful completion of:

- preparation work, including reading tasks; a subject question bank; programme questionnaires and personal food diary/activity log
- attendance and participation in a 3-day training/assessment programme, including completion of individual/group independent tasks
- a portfolio to evidence competency and reflective practice
- the delivery of a behaviour change programme in Defence (which will normally be the DOfit programme)

### Role specification

The DHWA training will up-skill health and healthcare staff to operate in the health and wellbeing domain, promoting physical fitness, health and wellbeing to support readiness and resilience in Service Personnel (SP). On successful completion of their training, the DHWA will provide support and guidance to SP on a range of topics which inform general positive health behaviours and physical wellbeing, particularly through encouraging PA and healthy eating. The DHWA will deliver evidence-based health promotion and weight management education, to encourage behaviour change. The adviser will also work one-to-one and in groups with SP. This role is designed to provide SP with a 'safe space' to discuss topics relating to their health and wellbeing, and provide a means of accessing additional multi-disciplinary support as required.

Whilst the emphasis is on weight management, the behaviour change competencies developed during the DHWA training can be applied to support many other aspects of behaviour change within the UK military, and beyond in terms of support to the families and dependents of SP.

## Learning aims

The primary aim of the DHWA training programme is to develop knowledge, skills and competencies in Defence health and healthcare personnel to promote the health and wellbeing of SP, so they are supported to increase their occupational fitness and reduce their risk of weight-related illness and injury. Secondary aims are to improve Quality of Life (QoL) and self-esteem in SP.

## Learning outcomes

The primary outcomes of the DHWA training are to develop the knowledge, skills and competencies in Defence health and healthcare personnel to:

- raise awareness of the impact of healthier behaviour choices on operational readiness and robustness through improving knowledge of the influence of diet and nutrition
- deliver an evidence based, multi-disciplinary education and behavioural change support to SP struggling to make healthier behaviour choices

Secondary outcomes of the DHWA training are to develop knowledge, skills and competencies in Defence health and healthcare personnel to:

- identify barriers for SP for making healthier behaviour choices
- develop personal PA/healthy eating programmes with SP
- supporting SP to make long-term behaviour changes

## Teaching and learning

The DHWA training will be delivered as blended learning through a combination of self-directed learning; classroom based teaching; interactive workshops; role-play scenarios; on-line and real-life tasks, and the supported and mentored delivery of a behaviour change intervention.



## The DHWA cohort

The DHWA Physical Training Instructor (PTI) cohort is a key resource, where the shared experience of all PTIs will provide added value to the cohort's learning and competency development. The DHWA cohort has been extended to include PTIs in addition to health and healthcare personnel to support multi-disciplinary delivery of health behaviour change support. The course provides a safe opportunity for health and healthcare personnel to try out their own ideas, knowledge and competency in small groups.

## Reflective practice

Reflective practice is central to the DHWA training. It is a core theme during DHWA preparation work, continues through the DHWA course, and is consolidated during the post-course assessments and preparation for delivery of a behaviour change intervention. Reflective practice involves self-assessment, acknowledging existing strengths and how to develop these further, as well as considering areas for further development. Reflective practice will assist in:

- integrating personal, academic and practitioner development
- enhancing self-awareness of strengths and weaknesses, and identifying directions for personal change
- creating a vision and a plan to reach aspirations

## Teaching style

The aim of the DHWA course is to analyse and discuss the many dimensions of health behaviour change, and to assess how certain models, tools and techniques could be used in practice. The general approach is 1 of participation and discussion. Exchanges among the on-course PTIs as well as between PTIs and the tutor are encouraged, and the tutor may frequently act as a facilitator. However, the 3-day course is very intense, with a considerable volume of material to be covered in the time available. As such, for key areas of debate or for contentious issues, PTIs are encouraged to continue their discussions during their evening tasked work. This is to ensure that a consensus is achieved and the cohort has a shared approach to delivering behaviour change support.

## Cohort engagement

Being prepared for the course. To ensure that all students obtain maximum learning and development from the 3-day training course it is essential that all pre-course preparation work is completed.

### Respect

The students should act respectfully towards their fellow students at all times. This includes maintaining and respecting shared experiences so that they remain confidential.

### Openness

Some of the ideas and approaches shared during the DHWA course may be challenging to military health and healthcare personnel. It is essential that DHWAs are open to new ideas and ways of thinking.

## Assessment

### Course duration

The notional hours for the DHWA course are provided in [Table 2](#).

**Table 2: DHWA course duration**

	Contact time	Directed time
<b>Pre-course work</b>	0	15
<b>DHWA course</b>	27	8
<b>Post-course work/ portfolio</b>	0	90
<b>Delivery of a behaviour change programme</b>	10	100

## Course assessment methods

The DHWA course is assessed through a mixture of question banks; directed tasks; written case study reports; delivery of a behaviour change intervention and personal reflection reports. The DHWA assessments are detailed in [Table 3](#), using the Defence Learning Environment as an online tool to log some of the tasks.

**Table 3: DHWA tasks**

	<b>Pre-DHWA tasks</b>
1.	Complete the 'beliefs about the causes of obesity' questionnaire
2.	Complete the 'attitudes towards persons living with obesity scale' questionnaire
3.	Complete the 'eating styles' questionnaire
4.	Background nutrition reading, including the specified Defence Nutrition Advisory Service factsheets
5.	Complete the question bank
6.	Complete the 'general nutritional knowledge questionnaire'
7.	Complete an individual 7-day food diary
8.	Complete an individual 7-day Physical Activity (PA) diary
	<b>DHWA course tasks</b>
1.	Analyse the servery provision based on the 'food groups' worksheet and the Eatwell Guide
2.	Evaluate dietary quality using the pre-course food diary and the information on assessing dietary quality
3.	Work out the PA level and total energy expenditure for the example 'PA questionnaire' and for 1 of the 24-hour periods in the 7-Day PA diary

4.	Become familiar with the DHWA behaviour change manual
5.	Working in pairs, list the determinants of PA for the listed scenarios
6.	Working in pairs undertake a 24-hour dietary recall
7.	Working in small groups use the myfitnesspal report to analyse the example diet
8.	<p><b>Behaviour change group exercise:</b></p> <ul style="list-style-type: none"> <li>• provide an interpretation of the scenario; applying what has been learned; how might be an appropriate response to these statements, and identify areas that are personally particularly difficult in this exercise</li> </ul> <p><b>Interpretation:</b></p> <ul style="list-style-type: none"> <li>• identify where the participant is in the cycle of change</li> <li>• if there is resistance categorising it</li> <li>• what else has been learned about the participant from the case history?</li> </ul> <p><b>Reply/response:</b></p> <ul style="list-style-type: none"> <li>• what bias is shown towards this participant?</li> <li>• how can increased engagement with this participant occur?</li> <li>• if there is resistance what strategy can be chosen to improve engagement and provide an example of what could be said? (for example using reflection/paraphrasing)</li> <li>• what other tools could be used (for example, decision balance sheet to build motivation to change)</li> </ul> <p><b>Reflection:</b></p> <ul style="list-style-type: none"> <li>• what areas of this exercise were found to be especially difficult and/or challenging?</li> </ul>
	<b>Post-course tasks</b>
1.	Complete the post-DHWA course question banks
	Task-1: Food labels
	Task-2: Food preparation and cooking techniques

	Task-3: Hydration
	Task-4: Alcohol
	Task-5: BCM
<b>2.</b>	Undertake BCM task
<b>3.</b>	Post-course case study
<b>4.</b>	Undertake a DOfit/behaviour change intervention
<b>5.</b>	Post-DOfit/behaviour change intervention reflection assessment

## Assessment Criteria

Each assessment or competency evaluation is awarded a mark out of 100%. Programme questionnaires will be a 'pass' by appropriate completion. All question banks objectively assessing knowledge will have a pass mark of 75%. All other assessments, which will combine application of knowledge and reflection, will have a pass mark of 50%. PTIs failing to achieve 75% in a question bank will be offered a re-sit; a second failure will require the PTI to undertake remedial work under the direction of the training staff prior to reassessment. PTIs failing to achieve 50% in reporting and reflection tasks should be offered feedback to provide understanding why the assignment did not merit a pass. Resubmission is permitted within a 4-week period of this time.

Marking criteria for competency tasks to achieve an AfN level-4 certificate in nutrition qualification are provided in [Table 4](#).

**Table 4: DHWA marking criteria for tasks to assess competency**

Rating	Evidence of competency
<b>5</b>	Demonstrates positive evidence of a high level of competence with no substantial negative evidence
<b>4</b>	Demonstrates positive evidence of competence with little negative evidence

<b>3</b>	Demonstrates similar amounts of positive evidence and negative evidence of competence
<b>2</b>	Demonstrates some positive evidence of competence, but with significant negative evidence
<b>1</b>	Demonstrates little or no positive evidence of competence, along with considerable negative evidence

In **Table 5**, detailed marking criteria are set out to provide specific feedback to PTIs in terms of the differentiation between grades for reports and reflections.

**Table 5: DHWA marking criteria for reports and reflections**

<b>Grade</b>		
<b>90-100 A++</b>	Outstanding answer, well written, highly structured and informed, showing striking personal insight and originality	
	Understanding	Full understanding of the relevant material and issues demonstrating, for example, originality in written assignments, comprehensive understanding of the knowledge base and critical judgement.
	Depth of knowledge	Extensive range of sources used and applied, appropriately to the assignment and of outstanding quality.
	Structure	Excellent structured, focused and well written presentation.
<b>80-89 A+</b>	Highly thoughtful answer informed by wider reading, showing clarity of thought, personal insight and originality	
	Understanding	Thorough understanding of the relevant material and issues

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		with informed discussion. Evidence of critical evaluation.
	Depth of knowledge	Full range of sources used and applied in a focussed manner.
	Structure	Clear and fluent style. Very well focused and structured.
<b>70-79 A</b>	Thoughtful answer informed by wider reading showing clarity of thought and personal insight	
	Understanding	Thorough understanding of the relevant material and issues with sound discussion.
	Depth of knowledge	A comprehensive range of relevant source material used.
	Structure	Clear and logical presentation.
<b>60-69 B</b>	Good understanding of basic principles and relevant evidence, with a coherent and logical argument	
	Understanding	Good understanding of the relevant material and issues showing evidence of discussion.
	Depth of knowledge	Relevant material.
	Structure	Coherent and well organised presentation.
<b>50-59 C</b>	Sound understanding demonstrated with some analysis	
	Understanding	Sound understanding of most of the relevant material and issues but is mainly descriptive.
	Depth of knowledge	Appropriate reading, attempts made to use the material in the work.

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	Structure	Clearly presented but little development.
<b>40-49 D</b>	Basic understanding of main issues demonstrated (fail)	
	Understanding	General knowledge of some areas demonstrated but lacks detail.
	Depth of knowledge	Basic material and limited use. Low quality in a number of areas.
	Structure	Adequate presentation. Some disorganised sections.
<b>33-39 F+</b>	Unsystematic incomplete and/or inaccurate (fail)	
	Understanding	Some knowledge but limited understanding. Work contains inaccuracies and meaning is unclear.
	Depth of knowledge	Limited and/or inappropriate material. Poorly sourced/ referenced (if appropriate).
	Structure	Disorganised/unclear presentation. Lacked logical order, structure not apparent.
<b>20-32 F</b>	Unsystematic incomplete and/ or inaccurate (fail)	
	Understanding	Work is mainly inaccurate or meaning is very unclear.
	Depth of knowledge	Poor and/or inappropriate material. Shows lack of understanding of the task.
	Structure	Poor presentation, spelling errors, limited structure.



0-19 FF	Unsystematic incomplete and/or inaccurate (fail)	
	Understanding	Work is mainly inaccurate or meaning is very unclear, uncritical and confused. Difficult to follow.
	Depth of knowledge	Poor and/or inappropriate material. Shows no discernible knowledge or understanding.
	Structure	Very poor presentation, poor spelling and grammar, lacks structure.

## Evaluation

### DHWA programme review

The DHWA training team is committed to a process of continuous improvement. To this end, students will be asked to provide feedback on the various elements of the DHWA training programme. The on-line evaluation forms provided on the Defence Learning Environment are relatively short and can be completed in a matter of minutes. Student feedback is critical. It provides the training team with valuable advice and constructive comment as to how the programme content and delivery might be improved.

There is also opportunity for students to provide face-to-face feedback to the training team during the 3-day contact time on the programme. Moreover, members of the training team also welcome feedback on how the training can be improved to support the DHWA role, in addition to observing the behaviour change programmes delivered by health and healthcare students.

### Annual programme review

Each year, there will be a comprehensive review of the DHWA programme. This will address:

- curriculum content, organisation and delivery
- changes in structure/content since the last annual report
- proposed changes
- assessment methods

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- teaching team/delivery staff
- feedback from MOD and non-MOD stakeholders and external reviewers
- examples of good practice in teaching and learning

### Periodic review

The programme is also subject to a triennial review, during which the following are considered:

- policy statement on the programme
- aims and objectives of the programme
- programme structure
- external accreditation during the review period
- evaluation of the quality of education
- teaching team/delivery staff
- programme lead's critique
- MOD and non-MOD stakeholder critique

## 4. DOfit timetable

Table 6. DOfit timetable (week-1 and week-12)

Day	Time of day											
	08:00- 08:45		08:45-10:15	Break	10:45-11:45		11:45-12:30	Lunch	13:30-14:15	14:15-15:00	Break	15:15-16:15
<b>Monday (commencing week-1)</b>	Arrivals and introductions		The environment		Goal setting	Why do we eat?			Action planning	Physical fitness assessment and BCM		Physical fitness assessment and wearable technologies
<b>Tuesday</b>	Exercise session 1		Designing a training programme 1		The benefits of PA		How to be more active?		How much energy do you need?			Exercise session 2
<b>Wednesday</b>	Injury prevention		Exercise session 3		Eating healthily in the military				Healthy cooking	What is in my food?		Exercise session 4
<b>Thursday</b>	One-to-one appointments and designing a training programme 2				Exercise session 5		Eating out		Food swaps and food labels			Exercise session 6
<b>Friday</b>	Preparing yourself for your fitness assessment		How to lose weight safely?		Relapse		Mindful and mindless eating		Course close			
<b>Week 12 Day chosen by cohort</b>	Arrivals and admin	BCM	Successes and challenges		Maintaining change		Physical fitness assessment		Physical fitness assessment			

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Note: Additional sessions.

- Weeks 2–11: BCM and group discussions
- Week-6: BCM and group workshop
- Months 4–11: BCM and group discussions
- Months 6 and 12: BCM and group workshop

## 5. DOfit participants and DHWAs focus groups

Opening statement undertaken by the independent evaluator: "...We were not involved in the development of the DOfit programme. We have been asked to provide an independent evaluation of the programme, and would like to explore your thoughts and feelings about the programme to support future improvements to the DOfit..."

"...So to start with..."

**Table 7. Focus group question proforma**

Question number	Main question	Prompts/probes
1	Please tell us a little bit about the DOfit programme and what it involves.	Is that a good summary? Would anyone like to add anything?
2	Now we'll talk about the run up to the first week. Can you tell us about how you came to be on the DOfit programme?	How did you find the process (of signing up)?
3	Can you tell us about any expectations you might have had before starting the programme? From: a) Programme b) DHWAs	Why did you expect that? How about previous attempts at losing weight, can you tell me about that? Did that past experience influence your expectations for the DOfit? What were your emotions in the lead-up to the programme?

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Question number	Main question	Prompts/probes
4	Now let's talk about the first week itself. What went well for you?	Can you tell me more about why you felt that? What in particular went well about that?
5	Can you tell me what you found most useful about the DOfit?	Why? What did you like about that in particular? (Use timetable as memory aid: Exercise sessions, classroom sessions, assessments)
6	What do you think didn't go so well?	Why? Does anyone agree or feel differently?
7	Can you tell me what you found least useful about the DOfit?	(Use timetable as memory aid: Exercise sessions, classroom sessions, assessments) Why? What were you not keen on? So you've told me that ..... wasn't useful – how do you think the programme could be improved? How does that sound to everyone? Does anyone have any other ideas?
8	Now we'd like to talk about the course instructors. Can you tell us a bit about the DHWAs and how they delivered the programme?	Which of the instructors did you find most useful? What things in particular did you like/dislike about...? Can you give an example? (Support, approachability, knowledge)

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Question number	Main question	Prompts/probes
9	Can you tell us about any changes you've made as a result of participating in the programme?	<p>Can you tell me some more about what you've been doing differently?</p> <p>Did any specific part of the programme trigger that change?</p> <p>Have you seen any impact of those changes?</p>
10	How do you feel about going forward?	<p>How will you use what you did on the DOfit to support you in the future?</p> <p>If not feeling positive, why not?</p> <p>Have you set any future goals?</p> <p>Do you feel you have the necessary:</p> <ul style="list-style-type: none"> <li>• knowledge</li> <li>• support (programme, unit, social media)</li> <li>• motivation</li> </ul>
11	Does anyone have any final comments or questions before we finish?	

## 6. DOfit participant case study

### proforma

#### Biography

What is your name/rank?

When did you join the Armed Forces?

What's your current role, and how long have you been in it?

What does your current role involve?

#### DOfit course

How did you find out about the DOfit course?

Was it what you expected?

How has attending the course/completing the course helped you?

What has been the biggest change/impact?

How difficult/easy was it to adopt the changes?

Would you recommend the DOfit course to other people?

Any other anecdotes or reflections of the DOfit course will be gratefully received.

Your contact details:



## 7. Senior leader interview questions

Opening statement undertaken by the independent evaluator: "...I was not involved in the development of the DHWA training nor the DOfit programme. I have been asked to provide an independent evaluation of this initiative and would like to explore your thoughts with respect to this initiative to support future improvements, specifically within the Army, but also for the benefit of the wider Defence. So, to start with..."

**Table 8. Senior leader interview questions proforma**

Question number	Main question	Prompts/probes
1	From your perspective, what is the priority with respect to health and wellbeing for the Army?	What is the aim? Why is this important?
2	Are there Defence/Army policies supporting this priority/delivering on this aim?	
3	Can you tell me a little about your role in the Army with respect to promoting and/or delivering on the health and wellbeing policy?	Is this a policy role or a delivery role? What functions do you perform (in an average week) to support this role? (for example, planning; reporting; meeting attendance; strategy development; receive training; delivery training)
4	Please can you tell me a little about your role/experience of the DOfit programme (relative to your role)	In what ways have you been involved in the DOfit programme and DHWA training?

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Question number	Main question	Prompts/probes
5	Can you tell me how you became involved with the DOfit programme?	Was this self-initiated, or were you directed to become involved? If self-initiated, what drew you to this programme? ... what knowledge, skills and competencies do you think you bring to the programme? How did you find the process (of getting involved)?
6	Can you tell me about any expectations you might have had at the start of your involvement in the programme? <ul style="list-style-type: none"> <li>• DOfit working group</li> <li>• DHWA</li> <li>• DOfit programme</li> </ul>	What were your expectations? Have you been involved in previous health and wellbeing initiatives? Can you tell me about that/these? Did your past-experiences influence your expectations of the: <ul style="list-style-type: none"> <li>• DOfit working group</li> <li>• DHWA</li> <li>• DOfit programme</li> </ul>
7	Now let's talk about the DHWA training. What has been your involvement in the DHWA training?	Role at the start of your involvement in the DOfit working group Role now and future role?
8	Can you tell me what you think are the strengths of the DHWA training?	Why? What in particular do you think has been well-received?
9	Do you feel there are any areas for development of the DHWA training?	Why?
10	What do you feel the Army's role is supporting this training capability going forward?	Who should be responsible for managing this capability? Who should lead in terms of assurance and governance? And for future developments?

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Question number	Main question	Prompts/probes
11	Now let's talk about the DOfit programme itself. What has been your involvement in the DOfit programme?	Role at the start of your involvement in the DOfit working group? Role now... and future role?
12	Do you feel there are strengths of the DOfit programme?	Why? What in particular do you think has been well-received?
13	Do you feel there are the areas for development of the DOfit programme?	Why?
13	How should the Army support health and wellbeing initiative going forward?	Who should be responsible for leading this initiative from an Army perspective?
<b>And now let's look to the future</b>		
14	Do you feel there are facilitators in the Army that will support this initiative going forward?	Culture/ policy/ branches/ formal processes/ structures? Anything else?
15	Do you feel there are challenges and/or barriers to this initiative going forward?	Culture/policy/branches/formal processes/ structures? Anything else?
16	Do you have any final comments about the DOfit working group initiative before I finish?	

## 8. RE-AIM evaluation framework

Table 9: RE-AIM evaluation framework applied to the DOfit programme<sup>i</sup>

Framework	Who	Description	Measurement method
<b>Reach</b>	Individual	The absolute number, proportion and representativeness of individuals who are willing to participate in an initiative, intervention or programme.	Rank and education level.  Participant information: Age, sex, ethnicity.  Readiness to change.
<b>Efficacy</b>	Individual	The impact of an intervention on important outcomes, including potential negative effects, QoL and economic outcomes.	Anthropometrics: QoL; mental wellbeing; dietary status; physical fitness.
<b>Adoption</b>	Setting	The absolute number, proportion and representativeness of settings and intervention agents who are willing to initiate a programme (for example, for DOfit this would refer to each of the service awareness and adoption).	DHWA number trained; DHWA number who are delivering; Pilot setting (details and cost).

<sup>i</sup> Adapted from Glasgow and others (1)

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Framework	Who	Description	Measurement method
<b>Implementation</b>	Individual	The clients' use of intervention strategies. Resources used by demographic factors.	<ul style="list-style-type: none"> <li>• experience interviews</li> <li>• satisfaction surveys</li> <li>• case studies</li> <li>• process interviews</li> </ul>
	Setting	The intervention agents' fidelity to the various elements of an interventions protocol, including consistency with delivery as intended and the time and cost of an intervention.	<ul style="list-style-type: none"> <li>• treatment fidelity</li> <li>• experience interviews</li> <li>• case studies</li> <li>• process interviews</li> </ul>
<b>Maintenance</b>	Individual	The long-term effects of a programme on outcomes after $\geq 6$ months after the most recent intervention contact.	Efficacy outcomes at 12-months (including 9-months post-programme)
	Setting	The extent to which a programme or policy becomes institutionalised or part of the routine organisational policies and practices	<ul style="list-style-type: none"> <li>• leader interviews</li> <li>• policy evaluation</li> <li>• planned future implementation</li> </ul>

## 9. Focus groups

Qualitative data were collected from six focus groups, involving 56 DOfit course participants. The thematic analyses of the focus group transcripts identified 11 main themes:

- factors relating to weight gain
- reasons for being on the DOfit programme
- expectations of the DOfit programme
- experience of the DOfit programme. What worked?
- experience of the DOfit programme. What did not work?
- influence of others
- military culture and environment barriers
- personal and socio-cultural barriers
- impact of the DOfit programme
- suggestions for improvement
- going forward

### Factors relating to weight gain

A small number of participants spontaneously discussed factors associated with their struggles with weight management and fitness. The majority of these factors were attributed to reasons perceived to be beyond the control of the individual. The most commonly reported reason for struggling with weight and fitness was due to previous injury or illness. Other reasons cited included: childhood experiences; the availability of fast-food; not being taught the knowledge and skills to cook and eat healthily, and alcohol intake. Only one individual from the six focus groups identified the cause of their weight/fitness problems as within their control.

Examples of feedback provided by participants:

“I think I’m here cos I’m deconditioned cos I had a lot of injury and illness and that got on top of me and the weight piled on cos of my illness...”

“Yeah, I was taught you can’t leave the table ‘til everything’s gone on your plate. And you definitely can’t have any dessert until it’s all gone”.

“... it’s becoming one of those things that people just don’t learn at home anymore, the wife isn’t the one that cooks all the meals and that’s why her mum taught her to do it, cos invariably her mum didn’t know how to do it, and now you get so many families where neither parent knows how to feed their kids. That’s the society we live in now”.

“My big problem was alcohol, and I reduced it, a bit. And I still am [overweight] now”.

## Reasons for being on the DOfit programme

Of the six pilot programmes involved in the focus group analyses, only two had a 100% volunteer attendance rate. Despite the emphasis on ‘readiness to change’ and the importance of voluntary participation, three DOfit programmes had a mix of volunteers and those who had been mandated to attend. One Army DOfit programme consisted entirely of participants who had been told to attend the programme.

A range of reasons for participating in the programme were provided. Participants wanted to: lose weight; get healthier; get fitter; make health behaviour changes; passing the single service fitness test, and recovering from/preventing injury. The majority of these reasons could be seen as extrinsic motivators (for example, doing something for a specified outcome).

Examples of feedback provided by participants:

“I think mine is the same sort of thing, getting back into fitness, pass my fitness test which I’ve now done but building on from that and continuing that lifestyle change”

“It’s not just the weight loss though is it, it’s the other health side of things, the internal health that you can’t see, that they kind of emphasised as well and I think that’s a positive point to take away”.

“For me it is about weight loss because of my injury. Theoretically it’s supposed to be easier to recover”.

It is worth noting that the majority of motivations for joining the programme were elicited from the groups comprising personnel who volunteered for the programme. The group with no volunteers could only identify one motivator for attending. In relation to this it was raised by the participants that being directed to go on the DOfit programme would not result in benefits, rather that being there out of choice, which was important for participant engagement.

Examples of feedback provided by participants:

“It was just personal thought really...,that means I’ve gotta sort myself out really” [being instructed to attend a DOfit course].

“If you’re told to do something as well, and you don’t want to do it, it’s absolutely pointless, cos you literally won’t learn anything, you just switch off and then

you're just disrupting the group. It's good that it's people here that actually wanted to be on it".

## Expectations

Expectations about attending a DOfit course were generally negative in nature. The most commonly reported expectation participants held before joining a course was that it was going to be like other military fitness courses and involve being physically worked really hard. Participants also stated that they were expecting week-1 would consist of others telling them what to do rather than having the opportunity to share their thoughts and experiences. Some also reported that they expected to be judged by others, in particular the PTIs. These expectations were formed as a result of experiences within the military culture as well as past experience of fitness programmes in the military.

Examples of feedback provided by participants:

"We probably expected to get beasted that whole week... rather than focussing on which exercises to do where or whatever, I think I was expecting more of a beasting like three times a day or something like that".

"That we were going to get judged. And that day-1 was going to be horrendous and that everyone was going to come out and think, 'oh I shouldn't be here, I don't want to be here,' and that is not what happened".

"And quite a lot of us have been in the Army a little while, and the way it used to be is they just sit you down and talk at you. They don't get your opinions. But this was a totally different experience for me cos it was more like, 'we're going to talk about this,' and everyone pitched in. He's not teaching you, he's getting you to give your thoughts."

A small number of participants reported their expectations that the DOfit programme could be used against them or their career. It was perceived that signing the participant agreement at the start of the course could lead to dismissal if no progress had been made.

Example of feedback provided by a participant:

"I was a bit worried about signing the [agreement] at the beginning of it. You had to sign a bit of paper saying that you're going to buy-in to the course and that you were committed to doing the course. And I am committed to doing the course, but my worry was in 12 months' time if you hadn't seen no progress, was that evidence to kick you out the Arm?. That's what I was worried about when I signed it".



## Experience of the DOfit programme. What worked?

This theme has been divided into four subthemes, which describe the elements of the programme that participants felt were effective and useful:

1. content and structure
2. group support
3. support from instructors and Chain of Command
4. use of apps, social media and wearable devices

### 1. Content and structure

The majority of comments made about the content of the DOfit programme positively related to the level and content of learning provided. Participants generally found the content useful and informative, and reported learning new information about both nutrition and physical activity, and this was identified across all groups. When asked which session participants liked most, the most commonly reported sessions were those addressing: barriers and facilitators; how much energy you need; food swaps; and eating out.

Examples of feedback provided by participants:

“Everything on the nutrition was beneficial. Food swaps etc., and actually doing the exercises where we was seeing how much sugar is in certain drinks, food, and then looking at food labels... I learnt a lot from the lesson on the food labels”.

“It was kind of re-education as well. Even though you may have been doing phys you might have been doing it wrong. So you’re not getting the full benefit of what you were doing”.

“I thought the eating out was really good and informative. I was trying to cut down on takeaways... my wife is one of those people that eats anything she likes and is still tiny, but I’m the opposite, I look at something and start putting weight on”.

Participants reported an appreciation that the programme highlighted that weight loss should be achieved safely and sustainably by reducing weight gradually. Participants also reported to being made more aware of the issues with fad diets.

Examples of feedback provided by participants:

“I think it was good, they covered diets and things and it was good for blowing away a lot of the misconceptions to do with certain diets. Explaining how those are bad for you and how they don’t particularly work long-term”.

“It wasn’t, ‘I need to lose 15 kg as soon as possible’. Now I’ve been told well no actually that’s a stupid idea, you need to do it over a longer period because... if you lose 15 kg you’re going to end up putting half of that back on again anyway and you’re going to have a horrible vicious cycle”.

Participants were also positive about how the programme was structured. Positive views were expressed regarding the delivery methods throughout the week-1 introduction to the course. Participants reported enjoying the balance between education, physical activity, and group discussion. It was suggested that the approach of the programme, which encouraged interaction between the participants and the DHWA, increased participation and engagement.

Example of feedback provided by a participant:

“Not just the gym stuff though, I liked the fact that during the course of the week, yeah there had to be a certain amount of PowerPoint presentations but ... a lot of stuff was interactive, get into groups and chat about it. And you know it was practical stuff for us to do... I think we learned a lot cos the methods of teaching us was different so it stuck”.

Participants also expressed gratitude for the programme being structured as educational that valued their input.

Examples of feedback provided by participants:

“The way the programme has been introduced to us has been brilliant. It is about education, it’s not a beasting”.

“So I went there and there was education on eating, and there was phys constantly, so I thought I was walking in to do that again and it wasn’t, it was totally different. And I really appreciated it.” [in relation to participant attending a different weight management course].

## 2. Group support

Positive comments pertaining to group support were identified across all groups. Participants felt encouraged that other members of the group were there to support them if needed. It was also reported that the group provided participants a sense of ‘not being alone’. A small number of participants referred to the group support as a form of counselling or therapy. It was also often reported that good group dynamics promoted and supported engagement with the programme.

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Examples of feedback provided by participants:

“It’s probably worked quite well cos we’re a fairly small group as a whole, it’s not massive amounts of people, everyone has got on well with everybody else and managed to sort of balance out taking the micky out of each other to sort of supporting each other as well wherever it’s needed with the balancing act of supporting people when people are feeling a bit down a bit when needed to. So there’s real positives, and downers as well when people are feeling a bit down but we can share those.”

“I found it a platform for everybody to open up and it was a wee bit of counselling so I found that really good to discuss openly”.

“We had one guy on the course... Having personalities that were quite funny, quite vocal... I think if it wasn’t for [name], personally we’d have just sat there for the first few days”.

Participants within the RN group, which had a mix of ranks, highlighted the ability for the group to break down rank barriers within the programme and communicate and support each other regardless of rank. This group cohesion and breakdown of rank barriers was said to be promoted by the lack of uniform in the sessions.

Examples of feedback provided by participants:

“Yeah cos there was no judging yourself either, there was no judging each other, ‘oh you’re just an AB [Rank: Able Seaman] or you’re just a Chief [Rank],’ or whatever... ‘you’re just one of us.’ We’re all in the same boat aren’t we”.

“One of the nicest things has been though is, again day-1 week-1, whenever we’re in uniform, whatever we’ve got on our shoulders, the minute we walk through that door it means nothing and the PTIs were the same you know, it doesn’t matter what rank we are and that is a massive barrier breakdown”.

“If we were sat here in uniform, barriers would be put up, people would all of a sudden not be as open or talk as much and maybe have as much of a laugh and a joke. So the fact that we come in in sports rig and rank is left at the door is brilliant”.

In addition to the group providing support and promoting engagement in the programme, it was also suggested that the group acted as a motivator for participants. Participants reported that the group dynamics encouraged healthy competition for physical activity and weight loss.

Examples of feedback provided by participants:

“It’s us that’s motivating each other... saying ‘are you getting the step count’ and the Watt bike, the 10k challenge, so we’re gonna smash some out this week just to beat his score...”

“Then once a week we were at [unit location] and then [unit location], and we had a WhatsApp page where we were putting up kinda healthy banter encouragement, so it was good saying right he’s lost that much I’ll try and beat him next week, or I’ve not lost as much and everyone else will say try and put that behind you, concentrate on this, maybe try this...”

“It was good as a group I feel we motivated each other as well as the help from the PTIs”.

### 3. Support from instructors and Chain of Command

A significant proportion of the discussion focused on the support provided by the DHWA-PTIs. All but one comment pertaining to the DHWA were of a positive nature; positive comments were identified across all DOfit course groups. Participants reported that the DHWA-PTIs were there to offer advice and support when needed, and were also helpful in negotiating time away from work if the Chain of Command queried attendance. Participants often stated the benefits of the DHWAs approach to communication; it was appreciated by all DOfit participants that the DHWA supported and encouraged participants, rather than shouting and ordering, and, importantly, did not judge participants. However, one participant highlighted that if the course had been delivered by PTIs with whom she had previously had bad experiences, she would not have stayed on the course. This highlights the approach of the DHWA, and the way in which they engaged with participants, as fundamental to the success of the DOfit programme.

Examples of feedback provided by participants:

“Yeah. And every time on the [course name] if I had concerns I spoke to them and they were always very helpful, they weren’t nasty or anything like that, and helped us along the way. They were always very encouraging. If anything the only thing that went wrong was maybe our own minds or whatever, sending us on the wrong path or whatever”.

“We got treated like adults... They just asked us questions and listened to what we had to say. That’s something, where over the road, you speak to people and they just look at you like you’re a bit of glass, just look right through you, cos you’re a bit overweight and that. But they treat you like adults, so they did, that first week”.

“I’ve been in the Navy 17 years and I categorically stated that if I came through the doors and I saw certain PTIs sat in that room I would not have come in this room. I would have turned around and walked away and apologised

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maybe for wasting their time. But the three PTIs that we met that morning, whether they were picked for this course I don't know. If not, we were... lucky cos the three that we have got I would say has been a fundamental factor in the fact that there is ten of us sat here today."

Positive characteristics often reported to be displayed by the DHWA by the participants included being: approachable; enthusiastic; passionate about the programme; willing to get involved; open to sharing their own experiences; and able to break down rank barriers. It was reported that the enthusiasm and the buy-in from the DHWA acted as a motivator for the participants.

Examples of feedback provided by participants:

"These guys are very approachable. It doesn't matter what rank or rate you are you can go to them you know. You can go to them and speak to them".

"Yeah, they've got the buy-in. See if the guys that are leading this course haven't got the buy-in, they can't sell it to you. The fact that they've bought into this whole programme, they're enthused, they're motivated, and we're feeding off that".

"These guys are here because they want to be here. Because they're here I'm like 'you tell me to do anything I'll do it' and that's why these guys have been absolutely spot on".

"And I think that's one reason we have put in so much effort cos they [referring to DHWAs] have put in so much effort for us that we want to put in the effort to make them proud of us cos they have put in the effort to help us out".

Positive Chain of Command support was identified in three of the six focus groups. Those participants who reported support from their Chain of Command highlighted how this made it possible for them to attend the review sessions as well as participate in physical activity. It was acknowledged that in order for the programme to work effectively, leadership needed to be supportive and promote the initiative.

Examples of feedback provided by participants:

"No, total opposite for me. I could come and go when I wanted. My boss was totally [onside] 'if you wanna go, go' so I was in the gym pretty much five times a week. So he didn't have a problem with me going whatsoever".

"And it's to do with the hierarchy actually buying into it. Cos my boss bought into it, he said 'yeah crack on, it's good that you're taking ownership and doing something'. He was really supportive but some people would be like 'nah I can't afford to lose him, nah he's not going'".

“The bonus we have with the DOfit programme is it’s Brigade, and above that Army, above that whoever, the Big Office, telling us to do it, so in some ways the shackles are on the unit that they have to provide”.

#### 4. Use of apps, social media and wearable devices

A small number of participants discussed the utility of physical activity apps for monitoring their food intake. Participants also discussed the benefits of using social media for communicating with each other. These platforms were used to share information as well as for group motivation. It is interesting to note that these methods of communication were not utilised within a DOfit programme, where all participants were directed to attend.

Examples of feedback provided by participants:

“Things like the WhatsApp group do help”.

“The only other thing I would add, it’s kind of a motivational programme and we discussed earlier on today, it’s everything that’s just been mentioned there but also we bounced off each other a lot with our group”.

“With our Facebook group, social media contact. So, that’s helped everyone sort of stay on track, or bring people back on track if they’ve sort of fallen off a little bit”.

Participants in the Army, who were provided with wearable technology stated these were beneficial. These benefits included increasing self-awareness of physical activity levels, self-motivation, and motivation through group competition. Some participants planned to invest in their own wearable technology due to their positive experience.

Examples of feedback provided by participants:

“I walk a lot more, now I’m using that wearable tech. I make sure I’m banging the 10,000 steps, making sure I at least get 150 minutes intensity. The whole time only once I didn’t get the intensity minutes and once I was about 10 minutes out. Always got the steps”.

“Cos we all wanted to beat each other on the step count... and I think that’s what kept people going to be honest”.

## Experience of the DOfit programme. What did not work?

This theme comprises five subthemes and describes the aspects of the programme participants perceived to be ineffective and/or lacking:

1. lack of support from Chain of Command
2. group representativeness
3. resources, material, and environmental factors
4. lack of continued structured sessions
5. lack of prior information and awareness

It is worth noting that participants' positive perceptions of the programme outnumbered the negative perceptions.

### 1. Lack of support from the Chain of Command

The most commonly reported issue with the DOfit programme was the lack of support and understanding from the Chain of Command. This was reported in four of the six focus groups. Negative references to lack of Chain of Command support and buy-in were more prevalent than positive references of Chain of Command support. Participants reported difficulties with securing time off work for attending DOfit sessions. This lack of support was partially attributed to a lack of understanding from the Chain of Command about the DOfit programme and what it entailed.

Examples of feedback provided by participants:

“I mean today was a perfect example. None of us should have had any hassle trying to get on this [week-12 follow-up] today, but it was an absolute nightmare. From that first week when we were allowed to come away, soon as that first week ended we were back in mainstream work and getting on this today when there's other stuff going on such as exercises and normal work, it was very difficult to get away for this. Very difficult. And again that's the support from the chain of command. And until the CO [Commanding Officer] actually says 'no, these guys started it so they've got to finish it, they've got to be here today'. You know we weren't really getting the support from the Chain of Command, as it should have been”.

“But like I said earlier my Chain of Command now don't officially know what this DOfit is, unless they've been told since last time I spoke to them. Unless they're fully aware of it then they're never going to be able to stamp down on people going 'why's he getting more time off than me”.

Frustration was also voiced with regards to the lack of protection and cover for individuals on the DOfit programme. It was suggested that while individuals were on the DOfit programme, and have signed up for the 12-month commitment, they should be protected from dismissal on the grounds of weight or fitness related problems during this period. It is worth noting that this issue, although raised with strong sentiment, was only evident in one of the focus groups. In this group, participants had just become aware of one of their fellow participants having being dismissed.

Examples of feedback provided by participants:

“If we’re on the DOfit course we should be under the umbrella, 12-months. That bubble encloses everybody. But after that 12-months, if we cannot pass the mandated fitness test that bubble should be popped”.

## 2. Group representativeness

It was highlighted across several focus groups that the DOfit cohorts did not always consist of the ‘right people’. For instance, it was raised in some focus groups that no senior ranking personnel had attended the programme. Some participants also highlighted that higher ranks used their rank status to make their juniors join the DOfit programme so that they did not have to. It was also highlighted within one of the Army DOfit programmes that there were personnel on the programme who did not need to be there, as they did not meet the (body composition measurement) entry criteria.

Examples of feedback provided by participants:

“Yeah, it was all junior ranks and there are a lot of senior ranks who are in worse state than anyone on this course”.

“No, there’s no officers”.

“There’s three people here that possibly didn’t need it, whereas you’ve got another handful that really needed it”.

## 3. Resources, material, and environmental factors

Participants from an RN course reported frustrations with the learning facilities in terms of location and lack of IT. It is worth noting, however, that the location and problems with IT had been addressed before the second RN course, where a more suitable location was identified. The first RN course also reported frustrations as the Army participants were provided with wearable technology, whilst the RN participants were provided with pedometers that were reported to be ineffective.



Examples of feedback provided by participants:

“Nope. Especially when you look at the funding... it's all about funding. I don't expect the lads to go out and buy it out of their own pocket but when you're looking at comparing it sort of like Army and probably RAF as well, the difference in kit they would have cos it's just the way it works. They did the best with what they had I think.”

“I thought that the course instructors were very knowledgeable in the way that they delivered the subject, though if you remember the IT was lacking and it didn't help in that respect.”

A minority of participants reported a dislike for the use of food diaries. It was reported that they were too restrictive, irrelevant in parts, and perceived as a 'chore' to complete.

Examples of feedback provided by participants:

“The food diaries. Don't like em. The way they are... it would have been easier just to write I ate this and then I ate that cos you can do your own portions like, you didn't need the whole one tablespoon of whatever and it just, it was very restrictive, it was like sandwich, jacket potato, filling, and I don't eat that stuff all the time so it was a bit difficult”.

“Part of it's [referring to food dairy] how did you feel. Were you happy? I didn't feel that was relevant, whether I was happy or...”

#### 4. Lack of continued structured sessions

It was reported that the lack of structured sessions after week-1 was detrimental for participants' motivation. This idea was shared across all groups except an RN group. It should be noted that the planned DOfit programme provides guidance for weekly follow ups between week-1 and week-12, as well as structured lesson plans for week-6 and week-12. It would be down to the individual DHWA and the scheduling of their DOfit course as to the sessions that were actually delivered in situ, although these were not always delivered as planned. The focus group feedback on this theme was exclusively from those courses where the planned weekly follow-ups (for the first twelve weeks), and monthly follow-ups thereafter, were not delivered.

Examples of feedback provided by participants:

“...When we did the first week they were there, guiding us through, and everything and I think most of us lost weight as well in the first week alone, so if that continued for the 12-weeks most of our goals would be achieved, but because we were left on our own for the 12-weeks some of us struggled to..”

“Some of the younger guys, leaving them to their own devices for 12-weeks is a free-for-all sometimes.”

## 5. Lack of prior information and awareness

Participants reported a lack of awareness about what the course entailed prior to the first week. This lack of awareness was suggested to be due to poor promotion of the programme as well as a lack of information available to participants about the programme. Although it was acknowledged that some participants did receive information packs prior to joining, this was not the case for everyone. Those who did receive the packs suggested that they received them too late, did not read them, or found that they did not provide enough specific information.

It was suggested that a lack of information led to participants' sceptical expectations of the programme. This perceived lack of prior information was identified in all the focus groups except one RN group; many of the participants on this DOfit course had known someone who had participated in previous RN DOfit courses, and therefore had heard positive information through word of mouth.

Examples of feedback provided by participants:

“I got back on a Friday, got told I was on the course, had no paperwork and everyone else came in and had paperwork and I was just on my own. I didn't have a clue.”

“With regards to it, it wasn't all that clear, I think the lead-up to it. I dunno if it was for other people but certainly for me it was me going and trying to find out from people what it is we have to do, when do we have to attend, do we give 'em the paperwork, right you need to fill out this and this...”

“There could have been more clarity at the start, as in this is what you're going to do”.

“We were coming on the course quite blind really”.

When considering the DOfit programme, and its implications and utility, there must be awareness of the wider social context in which the DOfit programme sits. The next three themes (influence of others, military culture and environment, and personal and sociocultural barriers) describe how the DOfit programme – and its implications and utility – fit within this wider context.

## Influence of others

This theme describes the influence of others outside of the DOfit programme and how they impacted on participants' experience of implementing the skills and knowledge they had acquired.

This theme comprised three subthemes:

1. Influence of family
2. Influence of peers and stigma
3. Comparison to others

### 1. Influence of family

Family was identified as a facilitator for some participants, but an equal number reported family as a barrier. Those participants who discussed family as a facilitator in making healthier choices, discussed their family being supportive of their healthier eating habits. It was also discussed that having children positively influenced participants to want to make healthier food choices.

Examples of feedback provided by participants:

“I made my missus read the booklet... so when I made her read it she understood it better... so now when I say ‘no I’m not eating it’, rather than her whinging in my ear she’s like ah right fair one. So it’s a lot easier that way for me”.

“I tend to look at food labels anyway really, but that’s cos I’ve got a family...”.

Participants also discussed family acting as a barrier towards making healthier choices. This included struggling to encourage the family to buy-in to the healthier choices and the availability of foods high in fat, sugar and salt, due to other family members requesting these foods be purchased.

Examples of feedback provided by participants:

“You eat healthily at work, go to the salad counter or whatever, then as soon as you get home you walk through the door and your other half’s like we’re having pizza tonight. Right, brilliant. And then there’s a curry the next day...”

“You know, it’s taking that home as well, convincing your family whether it’s your spouse, kids, whatever, that fish fingers and chips aren’t the best thing. Suddenly you end up cooking three different meals, you know, one for you, one for your other half and one for the kids.. and it’s just easier to cook two meals, one for the grown-ups one for the kids that sort of thing”.

“There was one point actually where I was trying to do well and she just sat down with a set of cheese and biscuits and I’m like ‘ahhhh”.

## 2. Influence of peers and stigma

The majority of comments pertaining to the influence of peers were of a negative nature. Participants suggested that there was a lack of understanding about what the DOfit entails from their peers. This lack of understanding was suggested to lead to stigmatising participants attending a weight loss programme. This negative influence of others could be seen as a barrier for motivation and engagement.

Example of feedback provided by a participant:

“That was external. I got that a lot from people in the squadron. They were like ‘oh what you going on that DOfit”.

Participants also reported being made to feel guilty by their peers for taking time out of the working day to attend programmed sessions and to take part in physical activity. It was suggested that they were made to feel as if they were ‘slacking off’, which created tension with their peers. This perception could be suggested to negatively influence participants’ motivation to undertake physical activity at work.

Examples of feedback provided by participants:

“We feel like we’re jacking on the guys because we’re not at work. And then when you walk in at half 9 you get the look, ‘where have you been?’ One, what’s it got to do with you?, And two, I’m still soaking in sweat cos I’ve just ran up from the gym, got showered, got changed to get back in... and then... you don’t get thanked”.

“Yeah but it also creates bad feelings in the workplace for some people cos of the jealousy, like he’s saying, that people are thinking you’re getting more time off”.

Some participants, however, did report a positive influence from their peers in the form of others making note of their efforts and being positive about the changes they had made.

Examples of feedback provided by participants:

“It was yesterday when a lieutenant tapped me on the shoulder and said ‘well done you’re looking really well’ and I’m like ‘oh am I... I feel shattered’. It’s like just little things like that are brilliant”.

“I haven’t noticed much of a personal change but people keep saying to me ‘you look really well, what are you doing?’. ‘Not much...’. So other people are noticing probably more than I am”.

### 3. Comparison to others

Some participants could be seen to compare themselves with others in terms of weight status. This made participants feel frustrated with having to engage in weight management when they felt there were colleagues who needed it more than they did. This comparison with others was seen as a barrier for motivation and engagement.

Examples of feedback provided by participants:

“It’s not just obviously... you could be [overweight] and fit, but if somebody’s [underweight] they could be unfit as well”.

“You see some of these people and you’re like why am I getting this, I get all this attention when there’s people there that are a lot less fit than I am, but they’re half the size of me. It is quite demoralising, but it’s one of those things... there’s a stigma attached to being [overweight] isn’t there?”.

“Yeah there’s people that needed it more than I did”.

## Military culture and environment barriers

This theme covers participants’ views on trying to implement the skills and knowledge attained from the DOfit programme whilst working within the military culture and environment. This theme comprises the three subthemes:

1. Working environment
2. Facilities for healthy eating
3. Military culture

### 1. Working environment

The working environment was the most commonly reported barrier within the military culture and environment, and was identified across all six focus groups. Participants reported that the military working environment made it difficult to fully engage with the programme and implement the healthier behaviours. The mobile nature of the job, moving locations and going on military exercises, did not lend itself well to accessing support.

Participants also discussed the difficulties of trying to implement healthier behaviours whilst working in an environment which required reactive actions to be taken. This was

most strongly related to physical activity, where participants felt that they were not allowed time for physical training.

Examples of feedback provided by participants:

“Well yeah it’s highlighted, but it hasn’t really changed it, purely because of the nature of our jobs. You can’t change our jobs. Obviously we can change the way we eat, which we’ve tried, but like we previously mentioned it’s hard to do if they keep sending you away on things and putting you on things”.

“Got back in that working environment and again it depends what you’re doing, there’s times it’s hard to continue the 100% effort you had on [week-1]. About 50% when I went back... times when I’d say to myself I’m going to go and do some training, just to walk away from it”.

“But not got the chance to, cos again we’ve got this real-time commitment, real-time work”.

“We sit around in our crew room not doing anything sometimes for 2 or 3 hours on end. There’s times where we’ll go in and we’ll just be sat down not doing anything for a few hours but we can’t go and do anything in case something does come up. Even though there’s a gym in the ground crew shack and we all have mobiles, but we’re not allowed to do it”.

## 2. Facilities for healthy eating

A large proportion of comments were related to the lack of opportunity to eat healthy within the military environment. Participants highlighted the lack of availability of healthy food within military establishments. It was suggested that neither the shops on site, nor the contracted dining facilities (for example, the cookhouse, galley or mess), offered healthy options. It was often reported that the standard of food offered in the contracted dining facilities was of poor quality and did not offer good nutrition.

Example of feedback provided by a participant:

“I do go in the mess but invariably, the amount of times you go in there and all the main meat options are just stuff that’s full of fat”.

The lack of cooking facilities when living on-site was also highlighted as a barrier for trying to make healthy food choices.

Examples of feedback provided by participants:

“I showed her [nutritionist] mine as well [referring to food diary] but it was one of those things where I think it came in handy cos they had the menus and things for cooking in microwaves for those of us living on-board and the only

cooking facilities a lot of us have is a microwave. So when they're talking about recipes where you need a stove and an oven and that for me, I thought that was pointless cos I don't have any of those".

### 3. Military culture

Participants highlighted the difficulties of engaging with the programme within the military culture. This was specific to the hierarchal nature of the military and "being told what to do". It was suggested that lower ranks would face a greater struggle when trying to engage with the programme, as they would find it more difficult to secure time released from work. Similarly, participants also reported barriers being placed on engagement with the programme due to other staff forcing their priorities onto participants.

Example of feedback provided by a participant:

"I'm able to stand up and say right I've got nothing to do I'm going to the gym, whereas these guys [referring to lower ranks] can't. He couldn't stand up and go I'm just sitting around doing nothing, can I go to the gym, cos he'll just get told no. Sit down in case something comes up".

## Personal and sociocultural barriers

This theme describes the barriers participants encountered when trying to implement health behaviour changes outside of the DOfit programme. This theme comprised the subthemes, describing participants' internal and external barriers:

1. Personal barriers
2. Sociocultural barriers

### 1. Personal barriers

The most commonly reported personal barrier was lack of self-motivation. Participants often reported needing the support and encouragement from the group or peers to maintain their motivation to make healthier changes.

Examples of feedback provided by participants:

"When you talk about the barriers, and obviously break it down, I think the one thing I have figured out as the biggest barrier is myself. Self-motivation. And that's quite possibly one of the hardest things, and I'll be honest I only started training again this week and that's only because the person sitting across the



desk from me has decided he wants to go training so he'll get up and... so I've figured out that the biggest barrier I have is self-motivation".

"I think it got you thinking about it. I'm not gonna lie I've kinda lost motivation for this. But I think that's where it might help having like a group meeting once a week cos like I said, after that first week everyone was really pumped and like yeah let's go do this, and then the first weigh in everyone was like yeah I feel really good, and then it's just, I dunno, for me it's kind of just dropped off".

Participants also discussed past experience of failed weight management as a barrier for motivation and engagement. It was discussed that past experiences of weight loss had been thwarted by reverting back to old habits.

Examples of feedback provided by participants:

"Nervous. Not fear, but just don't want to fail".

"But I've done this so many times now and obviously keep falling off the wagon, it's hard to keep it going".

"... like me personally, I flit around 120 kg, I get down around 109 or whatever and I get encouragement, and then priorities will change and I won't be able to do it and I put on weight by looking at a... [takeaway] advert. And I just put it all back on..., start again and then just back and forward, back and forward".

## 2. Sociocultural barriers

Participants described several sociocultural barriers influencing their ability to implement behaviour changes. These included: family responsibilities; time; workload; leave periods; and price of healthy food. It was suggested that family responsibilities were a priority, and participants would rather spend their time focussing on family rather than the DOfit programme.

Participants also reported struggling to find the time to make the conscious effort to make healthier choices, which was further aggravated by the perception that foods high in fat, sugar and salt are cheaper, more accessible, and more appealing.

Examples of feedback provided by participants:

"No, my own time is for my wife and kids. I'll do it during my work time cos they want me to do this. My wife don't want me to be skinny, they don't want me to be fit. It's this place that wants me here".

"Yeah, it was like over the weekend but I've got a family so that takes priority in my eyes".



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“I do look at the labels still it’s just... sometimes if you’re in a rush you just grab it don’t you. And it’s the nature of food being sold these days... It’s hard to eat healthy cos a) it’s expensive and b) it’s hard to get it”.

The most common barrier reported was high workload. Participants reported workload was interfering with time to complete physical activity. It was also reported to reduce their engagement with the programme, and motivation, due to lack of spare capacity.

Examples of feedback provided by participants:

“It’s just weekends cos obviously during the week we’ve all got quite busy jobs so during the weekend you tend to, not out-pin but have a few drinks and then obviously a few drinks leads to more and a kebab”.

“It does give you motivation, it’s just work sucks it back out of you again when you do stupid hours and do stupid hours [military] exercises. That’s for me anyway. I went out and bought running trainers. I’ve never bought a pair of running trainers since I joined the Army. I went out and started buying stuff cos I wanted to start running and stuff, and then work sucked it out of me throwing me on 5-week [military] exercises in the middle of nowhere. It’s just one of them things, work just sucks it out of you. But at the start it obviously gave me a big boost”.

Leave periods were also reported as a substantial barrier to motivation and engagement. This included Christmas and the summer leave periods. Participants reported regressing or relapsing over leave periods. This was explained to be a result of the social norms of eating habits and relaxation during these periods, as well as losing the routine they had developed at work.

Examples of feedback provided by participants:

“Like I said in that questionnaire, starting this thing before Christmas was not a good idea, cos you knew in 12 weeks’ time you’re gonna go through Christmas and you’re gonna get people... miserable cos we’ve regressed”.

“We got like our work-out routines and that in to our working days and then all of a sudden we’re not in work and it’s like, ‘oh I’m going to have to think about this now’. So I think just being on leave and not being in work it just upsets your pattern”.

## Impact of the DOfit programme

This theme describes participants' expressions of the impact and changes that have occurred as a result of participation in the DOfit programme. The majority of participants described positive changes as a result of participation in the programme. The theme is made up of six subthemes:

1. Mindful choices
2. Health behaviour changes
3. Weight loss
4. Psychological benefits
5. Physical benefits
6. Impact on others

Weight loss and improvements in health behaviours were reported across all focus groups.

### 1. Mindful choices

Participants described how the knowledge and skills they had learned throughout the DOfit programme had helped them become more mindful about the choices they made regarding their food intake and their physical fitness levels. Improvements in eating habits were the most commonly reported change as a result of the programme. It was stated by some that participation in the programme had made them feel empowered to make their own mindful choices regarding their weight management. Mindful choices highlighted throughout discussions included: putting more consideration into the types of food eaten, the portions sizes, as well as the times people were eating. These mindful choices were involved in the processes of food shopping, food preparation, and eating out.

Examples of feedback provided by participants:

“Obviously it comes down to mindful eating again, choosing sauces that aren't as creamy, a tomato sauce, just knowing what's in stuff so you can choose, you know if I have that that's going to be triple the calories than if I have that but you're still eating out so you can still have a nice meal but for a lot less calories and a lot less pain”.

“Food is a big one for me. I'm a lot more conscious about food that I'm buying now, which foods are going to fill me up for longer. I'm a nightmare for snacking on stuff so I'll have something, snack and then I'll think, 'oh, I'm not hungry now,' and then an hour or two later I'll feel hungry and snack again and it just goes on like that throughout the day. Whereas now the food I buy, through this course, now I know what food to eat to fill me up for a lot longer,

four or five hours at a time so again that nutrition side has been the biggest side for me, that nutrition side”.

“Yeah. I won’t eat after six o’clock. I look at food more now, I even look at drinks now to see what’s actually in them. That lesson for me encapsulated it, cos now I know what to eat depending on what I’ve done each day, I know roughly how much I need to eat to maintain it rather than overfeeding or underfeeding”.

In addition to improving mindfulness regarding food choices, participants also described making an effort to improve their physical activity levels as a result of participation in the programme. Changes included making time to do physical activity, walking more, and attending the gym more.

Examples of feedback provided by participants:

“Finding the time during the day to do some fitness. I never would have done anything before this”.

“I’m purposely now walking everywhere. They were dishing out car passes when it got taken over by a civilian company and I never got one through circumstance. ...So I’ve been walking everywhere now, which is very beneficial”.

“I’ve been clocking in at the very minimum at work between 12 and 16,000 steps a day”.

## 2. Health behaviour changes

A range of health behaviour changes, which were attributed to the knowledge and skills gained on the programme, were discussed. Participants discussed positive changes such as eating breakfast; increasing water intake; reducing alcohol consumption, cycling to work rather than driving; reducing sugar intake, or increasing fruit and vegetable intake. The most commonly reported health behaviour change was eating breakfast, followed by increasing water intake.

Examples of feedback provided by participants:

“Just changing the way that I get to work, so instead of driving I now try and cycle in and cycle home, and take a longer route on the bike instead of taking the shortest”.

“Alcohol is the biggest change I’ve had. I used to go out two, three times a week, and I go out once a week now. Last two weeks I’ve not drunk...”

“I drink water now, I never drank water before”.

### 3. Weight loss

It is worth noting that weight loss appeared to be a secondary outcome of participation in the DOfit programme. Participants more frequently discussed the attainment of knowledge to make mindful dietary choices and healthier lifestyle changes as the principal outcome. When weight loss was discussed, it was most often regarding positive weight loss. Participants discussed weight loss with regards to body mass lost, the fit of their clothing, and changes to their body shape.

Examples of feedback provided by participants:

“I’ve got like a wishful number. So I was 106 kg and I just weighed myself today and I’m 96 kg. So I’ve lost 10 kg since the beginning. I want to get now down to about 90 kg cos I think that’s more of a healthy weight for me”.

“Yeah. And I got to the point where I could pull my trousers down done up, quite easily. I nearly had to go to the clothing store and get them exchanged at 1 point”.

“Well it’s made changes to peoples’ shapes, sizes, weight, we’re all different, I mean some of us have lost two or three centimetres off our waist this week, some people have lost lots which is great. And cos, well some of us see each other quite often, but those we haven’t seen for a couple of months you go, ‘wow, look at you’”.

Not all participants reported a positive weight loss. A minority of participants reported putting weight on since joining the programme. They had felt they had been making better progress on their own accord prior to joining the programme. It is worth noting that the few participants who shared this experience were all from the same Army focus group, which was comprised of non-volunteer participants. Others noted not losing weight, as they were a healthy body weight, but were motivated to increase their fitness levels instead.

Examples of feedback provided by participants:

“No. All the stuff that they’d gone through, I knew most of it anyway, because I was doing better on my own. I’ve gone on this DOfit course, tried to change to what this course has recommended, and it hasn’t worked. So I’ve tried it for the three months, it hasn’t worked, so I’m just going to go back to what I was doing before the course”.

“I’m sort of the same as well. Before I started the course I lost about 7 kg, then when it was like ‘no you can eat more, you need to eat more but the healthier things’ I started doing that but I put it back on”.

“I’m still the same weight but I don’t need to lose any”.

Other participants who were unsuccessful at losing weight reported frustration with the lack of progress despite making an effort to make healthier lifestyle changes. They found their lack of progress demotivating and disheartening. It is worth noting references to weight gain, or lack of weight loss, were only identified in those focus groups that comprised non-volunteer participants, and the most prevalent were from the Army focus group where all the participants had been instructed to join the programme.

No such negative comments were elicited from focus groups where all the participants were volunteers.

Examples of feedback provided by participants:

“I’m gutted because I’ve stayed the same weight and I’ve gone two weeks without alcohol”.

“It’s losing the weight from here [stomach area] that’s going to go last... I’m losing inches but I’m not losing a hell of a lot of weight, which was annoying me”.

#### 4. Psychological benefits

Participants reported psychological benefits as a result of the DOfit programme. Such benefits included: improved mood, increased confidence, increased motivation, and an increase in energy.

Examples of feedback provided by participants:

“Generally I’m a little bit happier”.

“More confidence. Feeling good and that’s rubbing off on folk”.

“I find it a lot easier, the point you made, a lot easier to motivate myself”.

“I feel better in myself, not just about losing weight but just better in myself, more happy, more healthy, more energy. Not lethargic”.

#### 5. Physical benefits

Participants believed that participating in the DOfit programme had increased their fitness levels, which resulted in them feeling fitter and healthier. In addition to the improvements in fitness and health, participants also reported that their sleep had improved as a result of participation in the programme. Some also reported health benefits such as lowered blood pressure and a reduction in caffeine-induced headaches.

Examples of feedback provided by participants:

“Weight loss would be amazing, but I’m more interested in just being healthy. Every time I go to the nurse ‘is my blood pressure ok?’ It’s great. That’s good’.

My heart rate's getting lower, which obviously means I'm getting fitter, which is good. If I manage to lose weight at the same time that's even better".

"For me personally I feel as though I'm a lot fitter and healthier just from having made these changes in my life, it sounds like a cliché but I feel a lot healthier".

"I'm sleeping better. Cos I'm eating healthier I'm ready for bed, whereas before I'd go to bed and I wouldn't be ready, I'd still be irritable... Whereas now I literally go to bed and after a few minutes I'm away, whereas before I'd be tossing and turning pretty much all night and wouldn't get a good night's sleep... and it obviously gives me more energy in the mornings".

## 6. Impact on others

Discussion surrounding the impact the programme had on others was of a positive nature. In the main, participants discussed how changing their diet had also directly influenced the diet of their children. Others also discussed the positive impact of their participation on their spouses.

Examples of feedback provided by participants:

"So I would say I'm a bit motivated yeah. I'm a single mum so my kids eat what I eat, they don't have a choice. That's it".

"If anything that's made me implement it more with my kids. ...They made us think about how big our stomachs actually are, and obviously I eat way too much. I'm very mindful of that. I probably eat twice the amount that I should do, and I always sit there every dinnertime and say 'right you need to eat all your dinner otherwise you're not getting pudding'. Why? Why do that? And I still do it to myself now, and it's like no I'm gonna leave it. I'm full up, my body's telling me I'm full up, and like [my son] will turn round to me and say 'mum I'm full up' – great, that's fantastic, don't eat any more".

"Yeah my missus is just starting to lose weight as well now, so she's doing it with me. It's easier when someone's with you doing it, and she's not chomping down chocolate bars and I'm thinking 'I could do with a chocolate bar right now'".

## Suggestions for improvement

The focus group participants provided a range of suggestions for programme improvement. The most commonly reported suggestion for improvement was to have more regular DOfit group sessions. This was highlighted in five of the six focus groups. Other suggestions included: better promotion of the programme; including the programme in standard military training early in peoples' careers; using health risk as a

means of selection; making DOfit sessions mandatory/protected time; introducing swimming sessions; allowing participants to keep the wearable technology; and including the DOfit programme on to the Joint Personnel Administration course list.

Examples of feedback provided by participants:

“I think that there needs to be, on week 3, 6 and 9, a day where everyone gets together and they do an activity together”.

“No, we was saying this earlier, perhaps the nutrition side of things could get put into Phase 2 training cos obviously Phase 1 you get everything cooked for you and you’re in Phase 1 so you go to the gym at this time, you’ve gotta be here, you’ve gotta be there and doing other things”.

“If you did [a group session] every 4 weeks, like a set date and the troops know this person cannot leave. I need this person on this camp at this time. I think everyone might have done a little bit better cos we would have constantly had his input rather than people being working too long... arguments with people, not letting people come... whereas if it’s more structured. The Army like it more that way don’t they?”.

## Going forward

A small number of references were made regarding how participants felt going forward. Despite a small number of comments, the majority were positive. Participants stated that they felt motivated going forward, this motivation could be seen to be driven by participants’ aims to make long term changes and to convert the information and behaviour they had learned into healthy habits. Some participants reported apprehensiveness regarding their on-going journey. This apprehension largely came from concerns surrounding what support would be available going forward.

Examples of feedback provided by participants:

“So I think I’m yeah motivated. I’m not really pumped, but I’m motivated to continue”.

“The ultimate goal is for the permanent change I think. Everything else is just way markers on the route to getting there, in effect”.

“I’ve got the knowledge, it’s just I hope that the support... cos obviously [DHWA] is posted now up to Aldergrove and we don’t know who the new PT staff is coming in. Hopefully they buy into it as well, what [DHWA] has set up, and don’t completely change it or wipe it out”.

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With regards to the future of the DOfit programme, participants discussed knowing of others who would like to join the next DOfit programme. They believed that this was due to passing on their positive experiences as participants.

Examples of feedback provided by participants:

“I’ve got guys at work now that I speak to and work alongside, and they’re going ‘when’s he doing the next one, I’ll see if I can get on it’, cos I told them all about the course and said it’s really informative and they said ‘that sounds quite good, I’ll get myself on that next time they run one’”.



## 10. Case study. Thematic data

The thematic analyses of the case study data identified five main themes of the DOfit programme:

- awareness
- participant expectations
- impact and changes made due to participation
- easy or difficult to change
- concluding remarks

### Awareness

From the case studies, eight participants found out about the DOfit programme through unit communications, including emails, weekly orders, and poster adverts in gyms and medical and dental centres. Seven found out about the course through word of mouth, most commonly colleagues, and of those two explicitly identified a previous DOfit attendee as recommending the course.

### Participant expectations

Whilst there was a balance between participants who felt the DOfit programme did, or did not meet their expectations, feedback was overwhelmingly positive. Only one out of 16 respondents provided negative feedback; this participant did not feel appropriately prepared for the maintenance phase of the weight loss programme. The DOfit was generally perceived to have exceeded the expectations of participants.

Examples of feedback provided by participants:

“Yes, but far exceeded my expectations. The course managers and team were very engaging and really wanted us to succeed”

“It was all I had hoped for, and not what I expected”

### Impact and changes made due to participation

Participants acknowledged the education received from the DOfit course and its contribution to physical and psychological changes in themselves. Increased understanding around physical activity and nutrition were the most commonly cited

areas. However, two out of 16 reflected on improved understanding of their psychological relationship with food, which allowed them to take ownership and change their eating behaviour. This education, combined with support from the DHWA and co-participants, encouraged and supported behaviour change. All participants reported a weight loss change, and the associated psychological improvements (for example, self-confidence, motivation) that contributed to their success. One participant referred to improved speed of injury recovery. These observations highlight the importance of education coupled with identifiable success, promoting positive psychological changes, in supporting longer-term behaviour change.

Social support (of the DHWA and co-participants) was regularly cited as important in encouraging and maintaining behaviour change. Three case studies reported that behaviour change and weight loss were “easy” during the course, but maintaining lifestyle changes was difficult if there was a lack of support or a lack of regular follow-up sessions with the DHWA. In this instance “regular” referred to planned sessions that need not necessarily be weekly was suggested.

Personal achievements associated with participation on the DOfit that were most consistently discussed as being impactful included: weight loss; improved fitness; ownership of behaviours; and military promotions. A number of participants commented on their negative relationship with physical training pre-DOfit, which had arisen from feelings of failure and of being judged by others. DOfit attendance had increased their fitness and improved their self-confidence, and for the first time they felt empowered to attend military gyms.

Examples of feedback provided by participants:

“I walked into a gym with my head held high knowing that I had a workout planned in my mind rather than just sitting on an exercise bike in the furthest corner wanting to be invisible, not achieving anything”

“I want to end the fear factor of attending RN gyms”

Nevertheless, ongoing participation was reported to be dependent upon continued support. Lack of such support, especially from the Chain of Command, was stated as having a negative impact. Moreover, without support per se, the positive impact of the programme on behaviour change diminished over time. Participants found it more difficult to maintain motivation to change without support, which indicated that participants had not taken full ownership of their behaviours.

## Easy or difficult to change

An overwhelming feeling from participants was that the DOfit course was easy to implement, but difficult to maintain. The ease of implementation was attributed to understanding manageable incremental changes, as well as the support and focus on the task.

Examples of feedback provided by participants:

“Very easy [to implement] as the changes were easy to adopt as some of them were about incremental changes adding up to a big change.”

Some of the case studies reporting a reliance on the DHWA were from participants who had not completed the full 12-months of the DOfit programme. Thus, whilst improving knowledge and understanding through education was an early benefit of the DOfit, completion of the 12-month programme appears important for developing self-reliance and longer-term behaviour change. Maintenance was highlighted as a challenge, and participants felt that that this element required as much attention as the initial 5-day course. The planned DOfit programme does provide focussed sessions for 3, 6 and 9-months to support maintenance, but these sessions seem to have been less universally delivered.

## Concluding remarks

All 16 case study participants would recommend the DOfit course to others. However, this was caveated in terms of an individual’s readiness to change; participants acknowledged that self-motivation and prioritisation to change were essential for success. Also, regularising and maintaining support (for example, through planned follow-ups) was deemed essential for longer-term behaviour change. Receiving sufficient support was reported as a significant factor throughout the case studies, being perceived to ‘make or break’ success.

Examples of feedback provided by participants:

“It is such a positive and life changing course, one of the best courses I have done and one of the best weeks I have spent in the Army.”

Of note, participants felt privileged to have been given the opportunity to attend the course and praised the DHWAs. The DOfit course was praised for being delivered at just the right level, and for the rapport developed between the staff and all participants on the course.

Examples of feedback provided by participants:

“The pitch of the course was perfect being non-military in style, inclusive, interactive and encouraging.”

In terms of specific facilitators and barriers to change, it was reported that participants in private accommodation were better able to implement eating behaviour changes, whilst those in military accommodation were limited by the dining facility food provision and lack of kitchen facilities. Thus, perceptions of the impact of the military environment and military life was reported as a consistent barrier to successful behaviour change.

## 11. Leader interviews. Thematic data

The thematic analyses of the leader interviews data identified four main themes:

- support provided
- development required to better support the DOfit Programme
- challenges and barriers to DOfit efficacy
- facilitators for supporting DOfit efficacy

### Support provided

Supporting SP to improve their health behaviours, was identified as a high priority issue by the leaders in order to increase the number of SP able to deploy. All interview participants discussed how the DHWA training and DOfit programme provided much needed knowledge and “harmonisation of approach”, for both those delivering and receiving the weight management intervention. Specifically, with regards to the DOfit programme, it was asserted that:

“...It’s taken the pressure off the Royal Army Physical Training Corp Instructors of having to try and think up something and actually having a structure to follow, which has been really important”

The majority of interview participants identified the behavioural change focus of the training and weight management intervention as being the main strength, with the emphasis for change being placed on the individual SP.

“What I have found from the, the DHWA training and the delivery of the DOfit is [that] the emphasis is on the person ... it empowers the person to take responsibility for their actions ... that will influence their behaviours and hopefully prove successful... As opposed to just, you know, forcing them into what they are not buying in to”

### Development required to better support the DOfit programme

All interview participants stated that Chain of Command ‘buy-in’ was key to the success of the programme. The majority of interview participants identified the importance of making time for the DHWA to deliver the weight management intervention, and for SP to

participate in the DOfit, as being key to its success. Several participants reported that current communication of the (DHWA training and DOfit) programmes from the 'top down' was limited and a cause for concern.

"It's having someone within the Chain of Command at the highest levels, whether it be within one arm [Service] or shared across the three, that is continually trying to push this forward"

Several participants cited areas of communication that worked well and supported the aims of the initiative. Examples included the communication of positive success of individuals within units:

"Once you get a unit [who] have had a course run and they see the 12-week point post initial course, and they are starting to see a difference in their soldiers, there is a buzz that goes around which is good"

Areas cited as requiring development included the DHWA Joint Personnel Administration competency life expectancy, requalification, and the point at which a DHWA becomes qualified (for example, has completed the post-course assessment to be certificated by the Association of Nutrition with the Level-4 nutrition qualification). The poor uptake (completion) of the Nutrition Level 4 qualification, which was requested by the PTIs attending the early DHWA courses (Jan 2016), was raised:

"We have got a 3-year competency for now for Joint Personnel Administration, and I am not sure what is going to be the plan for the continuation of that"

## Challenges and barriers to DOfit efficacy

The majority of the leader interview participants cited that the biggest challenge to DOfit efficacy was unit operational tempo and priorities. The majority of participants identified that SP being posted (for example, DHWA deliverer or DOfit participant) was a high risk to the success of unit DOfit programmes:

"It's just the tempo, the tempo at unit level. Umm, we do get courses that start in good faith, with good Chain of Command support, with good resources, something happens in the unit, unit role changes, something comes in, umm, and suddenly it's on the back burner"

Other challenges identified by the leaders were the sensitivity of approaching SP when talking about their weight, and the need for an organisation to take ownership of the

programme and establish it within Defence. This concurs with issues raised within Support Provided and Development Required.

“The challenges and the barriers have been trying to establish or trying to influence Defence umm Training Requirements Authority to take the lead with the training”

All leaders cited that the Defence Occupational Fitness Programme is currently driven forward by a small team, with one individual person leading the way. Concerns were raised that if any personalities presently involved in supporting this initiative were no longer available, momentum within the organisation would be lost.

## Facilitators for supporting DOfit efficacy

All participants acknowledged the need for a multidisciplinary approach for the programme to best support SP. The majority of participants specifically identified that the nutrition sessions were the most well-received workshop sessions. This concurs with the increased nutrition knowledge measured in DOfit participants.

“It’s important that it [the programme] is delivered as a multidisciplinary approach, with key individuals and specialists to support the programme”

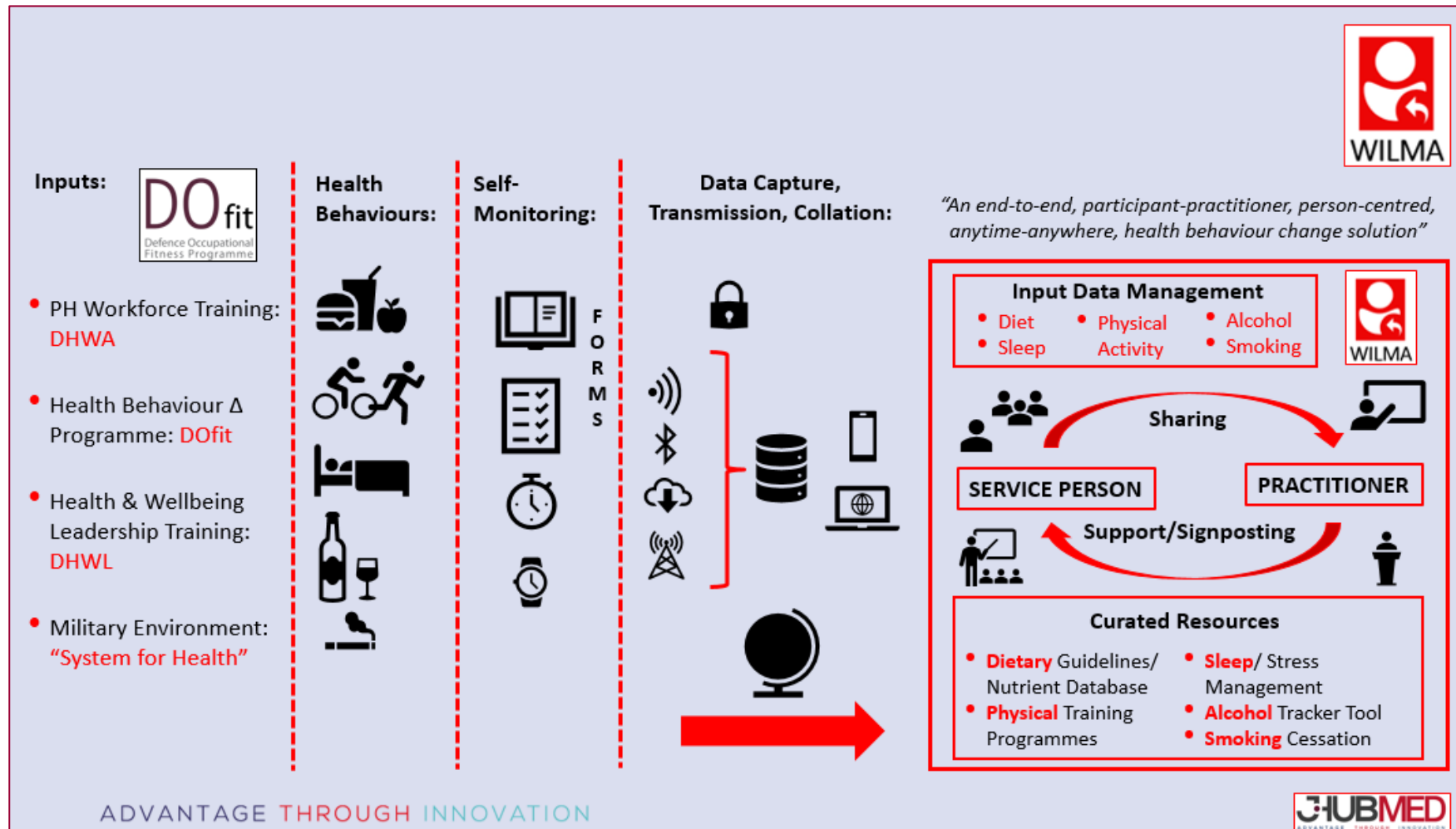
The leaders identified the importance of the “one-to-one session”, which normally takes place week-1, day-4 of the standard DOfit programme:

“The individual can then reflect on preconceptions and how they were living, and they have already started to make goals and small changes to their diet, their nutrition...”

“It’s more about them answering the golden question which is really if we could change anything what would it be, ... and what can you do to move yourself towards that, and it’s about I suppose them having that lightbulb moment”

# 12. Wearable Integrated Lifestyle Management Application (WILMA)

Figure 2: WILMA: A conceptual model





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1. Glasgow RE et al. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *American Journal of Public Health*.89(9): 1322-1327.

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