

## Reflections of a Healthcare Professional...

# Feeling stressed and gaining weight – a holistic management plan to support lifestyle changes



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### Summary

In this article I reflect upon my dietetic management approach for a female (Sally\*) who was seeking support for weight loss. Sally reported persistent feelings of tiredness and everyday stress, which were hindering her weight loss attempts. I discuss my rationale for the dietetic management approach chosen, which included behavioural change techniques to improve Sally's motivation to exercise, and a probiotic containing the *Bifidobacterium longum* 1714® bacterial strain.

\*Name has been changed

### Introduction

Many of the individuals I provide dietetic advice to are seeking support and advice for weight management. A large proportion also report struggling with feelings of stress, a psychological factor identified to be a barrier to weight loss<sup>1,2</sup>. Specifically, research has identified feelings of stress to have a negative influence upon food cravings and motivation for physical activity<sup>1,2</sup>. It is therefore important that I incorporate stress management strategies into the advice I provide<sup>2</sup>. One such strategy is to increase physical activity, a lifestyle factor strongly associated with mental health<sup>3</sup>. Recent research has also suggested that supplementation with certain probiotics may help to improve feelings of perceived stress in healthy people<sup>4,5</sup>.

My dietetic management approach for individuals who are overweight or obese is centered around the provision of individualised dietary and lifestyle advice. However, it is widely recognised that individuals require further support to enable them to implement the behaviour changes advised. Therefore, the incorporation of behavioural change techniques (BCTs) is also key to achieving and maintaining weight loss<sup>6</sup>.

### Dietetic Review

Sally, a 43 year old female, told me of her 7kg weight gain during the lockdowns imposed during the COVID-19 pandemic. This weight gain meant that her body mass index (BMI) increased from 24 to 26.7 kg/m<sup>2</sup>, moving her into the 'overweight' category. Sally became visibly upset while recalling this, reporting that she felt '*fat and lazy*'.

Previously a very active individual who took part in high intensity exercise classes four times a week, Sally told me that she had not exercised in over two years, following her gym membership being suspended during the COVID-19 pandemic. The gym has now been reopened but she could not face going back as she felt '*unfit and depressed with her appearance*'. Sally's motivation to start back at the gym was decreased further by her persistent feelings of fatigue and low energy.

Sally's diet history revealed regular mealtimes based upon home-cooked and nutritionally balanced meals, however her portion sizes had not changed despite her reduction in physical activity, including three-course meals at restaurants most weekends. Additionally, she often ate foods high in fat and sugar when she felt stressed. When we discussed these behaviours, it became apparent that Sally was struggling to cope with feelings of stress as a result of being the main carer for her two young children whilst working part-time, with little help from her husband who worked long hours. This was heightened by one of her children having a diagnosis of autism, which Sally reported caused a lot of stress in her household due to communication and behavioural challenges.

Sally also reported a persistent feeling of tiredness, so she lacked the energy or motivation to make the changes to her lifestyle which she knew were required to lose weight. In addition to gaining weight, Sally was worried that her inability to cope with stress was negatively affecting her relationship with her husband and she felt guilty for not playing with her young children. Sally did not have any medical conditions or take any medications.

## Dietetic Management Plan

In agreement with Sally, we decided to focus upon increasing her physical activity levels as this could help with managing her feelings of stress<sup>3</sup>, which in turn might also help to reduce her tendency to snack on foods high in fat and sugar<sup>1,2</sup>. Empirical evidence has found 'goal setting', 'self-monitoring' and 'social support' to be among the most effective BCTs for promoting motivation to partake in physical activity<sup>7</sup>. Therefore, we incorporated these into the dietetic management plan, in which Sally committed to sign up to the 'couch to 5km' online programme, to record her progress in a self-reflection diary, and to go to gym classes with a friend.

In view of emerging evidence of the role of certain probiotic strains in helping to manage everyday feelings of stress<sup>4,5</sup>, we also discussed including a probiotic in her management plan. As the health benefits of probiotics are specific to the bacterial strain(s) they contain, particularly in this area<sup>4</sup>, I considered the research evidence available for specific probiotics in the management of feelings of everyday stress. In high quality research trials conducted in healthy adults, *Bifidobacterium longum* 1714<sup>®</sup> was shown to improve perceived stress and cortisol output<sup>4,5</sup>. Therefore, as part of a holistic approach to support Sally's lifestyle changes, I recommended an eight-week trial of a probiotic containing  $1 \times 10^9$  colony forming units (CFU) of *Bifidobacterium longum* 1714<sup>®</sup>.

## Dietetic Aims and Outcomes

The overall aim of the management plan was to support Sally's weight loss by improving her ability to cope with stressful situations and to improve her energy and motivation levels. In collaboration with Sally, we chose the following as outcomes that would indicate whether this aim had been achieved:

- ▶ Completion of the 'couch to 5km' running programme
- ▶ Attendance at gym 2-3 times a week to take part in fitness classes
- ▶ Have more energy to look after and play with her children
- ▶ Feel happier in herself

## Dietetic Follow-up

Over the subsequent eight weeks, I monitored Sally's progress via fortnightly telephone calls. Sally had achieved the goals of her dietetic management plans with improvement in her mood reported by week 2 and improvement in her ability to cope with stressful situations by week 5 (Figure 1). By week 8, Sally reported feeling energetic and motivated to exercise regularly, and had lost 2kg in body weight (BMI 25.9kg/m<sup>2</sup>). She described feeling 'happier than she has been in a long time' and her relationship with her husband and children had improved. After two years of struggling to maintain her exercise and weight loss attempts, she was very happy with her progress over the past eight weeks. While still unhappy with her weight, she was pleased with her progress and reported having the 'mental strength to continue to lose weight in a healthy way'. Reflective of this, Sally intended to continue running regularly and going to the gym with a friend, recording her progress in her self-reflection diary. Having taken the probiotic daily without any side effects, Sally also intended to continue to take the probiotic. She felt this was helping to manage her feelings of stress and fatigue, supporting her ongoing exercise and weight loss journey.

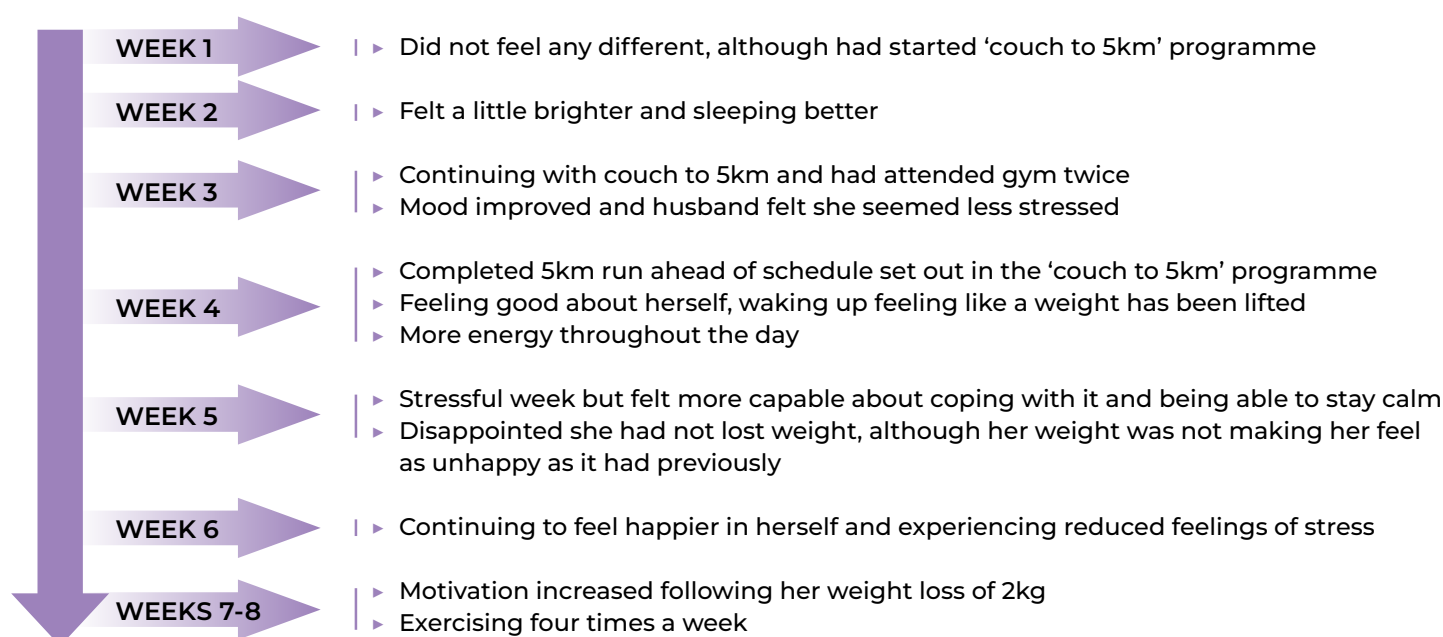


Figure 1. Reported changes in symptoms during the two-month dietetic follow-up period

## Dietetic Reflections

Sally is not alone in her struggle to maintain a healthy weight, with over half of adults in the UK living with overweight or obesity<sup>8</sup>. Sally, and others to whom I have provided dietetic advice, reported that the lockdowns imposed in response to the COVID-19 pandemic made their attempts to lose weight even more difficult. This is in line with research findings revealing that physical activity levels fell significantly<sup>9</sup> and over 40% of adults gained weight during this time<sup>10</sup>.

Sally's feelings of tiredness and low energy were negatively impacting her motivation to engage in physical activity. Research studies consistently identify low motivation levels to be a common barrier to engaging in the lifestyle changes required for weight loss and that this was heightened during the COVID-19 pandemic<sup>11</sup>. By incorporating BCTs demonstrated to target motivation levels, I was able to support Sally to overcome this barrier and increase her physical activity levels. Her reports of feeling '*happier than she has been in a long time*' likely acted to further increase her motivation to continue exercising.

Taking the time to fully understand Sally's lifestyle, and the factors influencing her dietary and physical activity behaviours, was imperative to the creation of the effective dietetic management approach I took. By uncovering her feelings of stress, we were able to work together to tailor the management approach to address this by focusing on physical activity and incorporating a probiotic containing *Bifidobacterium longum* 1714<sup>®</sup>, which has been shown to improve perceived stress, brain activity associated with fatigue and energy, and cortisol output in adults<sup>4,5</sup>. Research has highlighted that feelings of stress commonly present a barrier to weight loss<sup>1,2</sup>. Incorporation of strategies to address stress levels is considered useful when planning weight management plans<sup>2</sup> and something I will continue to include in future dietetic management plans.

My reflections provide a real-world example of the potential benefits of specific evidence-based probiotic strains as part of the dietetic management of individuals who are struggling to implement the lifestyle changes required for weight loss due to feelings of stress and/or low energy.

### Learning points

- ✓ It is important to take the time to understand any underlying psychological barriers that may be influencing an individual's dietary and physical activity related behaviours
- ✓ The incorporation of behavioural change techniques (BCTs) into dietetic management plans for weight loss is essential to help support individuals to make the required lifestyle changes
- ✓ The probiotic strain *Bifidobacterium longum* 1714<sup>®</sup> may be a useful component in the dietetic management approach for individuals experiencing feelings of everyday stress

## References

1. Geiker NRW et al. *Obes Rev*. 2018;19(1):81-97.
2. Greaves C et al. *Health Psychol Rev*. 2017;11(2):145-163.
3. Chan JSY et al. *J Psychol*. 2019; 153(1):102-125.
4. Allen AP et al. *Transl Psychiatry*. 2016;6(11):e939.
5. Wang H et al. *Am J Gastroenterol*. 2019;114(7):1152-1162.
6. National Institute for Health and Clinical Excellence (NICE). 2022. Available online: <https://www.nice.org.uk/guidance/cg189>.
7. Samdal GB et al. *Int J Behav Nutr Phys Act*. 2017;14(1):42.
8. NHS Digital. 2020. Available online: <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2020>
9. Stockwell S et al. *BMJ Open Sport Exerc Med*. 2021;7:e000960.
10. Public Health England. 2021. Available online: [www.khub.net/documents/135939561/175783630/Better+Health+and+PHE+obesity+campaign+attitudinal+survey+data.pdf/04231dab-0f93-ba7b-617f-8e503c758546?t=1631539249181](http://www.khub.net/documents/135939561/175783630/Better+Health+and+PHE+obesity+campaign+attitudinal+survey+data.pdf/04231dab-0f93-ba7b-617f-8e503c758546?t=1631539249181).
11. Robinson E et al. *Appetite*. 2021;156:104853.

This article reflects upon my real-life dietetic management of an individual - their name has been changed. I received payment from PrecisionBiotics<sup>®</sup> solely for my time taken to write this article, all views are my own.



## Reflective Article - Reflective Learning Guide

### Feeling stressed and gaining weight – holistic management plan to support lifestyle changes

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Dr. Sarah Schenker is an award-winning and experienced registered dietitian, accredited sports dietitian and public health nutritionist with a degree in nutrition and dietetics and a PhD in human nutrition. She is registered with the Health Care Professions Council and the British Dietetic Association, and has wide ranging clinical experience both within the NHS and as a freelance dietitian working with various food and drink brands and national sports teams.

In this article, Sarah reflects upon her rationale and learnings from the dietetic management approach she chose for an individual on her caseload seeking support for weight loss. Sarah discusses the impact that feelings of stress can have upon motivation to implement lifestyle changes required for weight loss, detailing how this informed her dietetic management approach which included behavioural change techniques to target motivation to exercise and a probiotic.

#### Learning Objectives:

1. To recognise the influence of feelings of stress upon dietary intakes, physical activity levels and compliance with weight management plans
2. To understand the potential benefits of incorporating strategies to manage feelings of stress in weight management plans
3. To consider the importance of including behaviour change techniques in weight management plans
4. To consider the potential role of specific probiotics to help manage feelings of stress as part of a holistic weight management plan

Complete this reflective learning guide to support your learning objectives. This can be filed in your CPD portfolio as evidence of your learning.

#### Reflective Learning Questions:

1. Reflecting on your own clinical caseload, consider:
  - a) How many individuals seeking support for weight loss report that feelings of stress present a barrier to their weight loss attempts?
  - b) What strategies would you consider including in weight management plans to help individuals reduce their feelings of stress?
  - c) What behavioural change techniques might you consider including in weight management plans to target motivation to increase physical activity levels?
2. How might the presence of feelings of stress, or other psychological factors, impact your approach to the dietetic management of individuals seeking weight loss support?
3. How could specific probiotic strains, with relevant evidence, be used alongside other strategies to improve an individual's ability to manage their feelings of stress?