

What is the topic/challenge – The human appetite system is intimately linked to body composition and therefore relevant for understanding and managing obesity. We will explore four issues that are evolving from current literature to create discussion about collaborative future research.

1. Food reformulation and innovation as a means to influence healthy and sustainable diets.

In the UK the nutritional environment is replete with a huge range of highly processed, cheap foods engineered with strong sensory appeal and backed up by intensive marketing. Many observers believe that the food environment is largely responsible for the current high prevalence of obesity. The role of dietary components (palatability, portion size, hedonic influence) can be considered in the context of foods that are satiating or promote satiety.

2. Big data approaches to develop understanding of drivers of appetite and food choice.

There has been growing interest in the potential of 'big data' for enhancing our understanding of a wide array of societal challenges including medicine and public health.

3. One diet does not fit all – bridging the gap between appetite research and obesity services.

Biological variability in human appetite is emerging as a recognised factor relevant to obesity, with individual differences in the profiles of hunger, peptides and food choices. This means that there is no single statement about appetite that explains obesity, giving opportunity to identify appetite mechanisms for such differences. Quality obesity services should reflect interindividual differences. We will discuss ways to could create a platform for exploring new ways of how we might use appetite expertise to support new ways of working delivering prevention and treatment in teir 1 - 4 services.

4. Supporting behaviour change - environmental drivers of obesity and food choices. This

embraces both prevention and treatment aspects - links to the publication from Public Health England – Health Matters: addressing the food environment as part of a local whole systems approach to obesity.