

FOOD'OLOGY

the key to changing eating habits successfully

Nutritionist *Leanne Cooper* looks at the science and the psychology behind some of our eating habits to help make sense of why some habits die hard, and why they came about in the first place.

The science of consumer behaviour has long sought to understand our shopping habits, but just how much do those in the business of changing lives understand about our own eating habits? Why do some foods hold more appeal than others? Why are some foods harder to say 'no' to? And why is it so hard for clients to change their eating habits? To answer these questions we need to explore the science and the psychology of food preferences.

Getting to know our food preferences

The foods we like and want are influenced by a number of factors, including internal ones such as genetics and our physiology (for example our taste receptors), and external factors such as our cultural background and family life. A little nature, a little nurture.

Our life stage will also influence our food choices; at any time your current health, lifestyle, personal life and beliefs will naturally affect what you choose to eat and what you choose not to eat (and drink). For example, mature aged adults may be influenced by health concerns, whereas students are more likely to be influenced by taste experiences and budget restraints. The importance of these factors becomes very evident when trying to amend an eating habit, and being aware of them can affect the likelihood of success.

In order to effect a change we need to understand how a behaviour has come about. We need to consider three factors: firstly, the way in which we have gained our food preferences, i.e. was it learnt or is it innate?; secondly, how long has the behaviour been with us?; and, last but not least, how often is it reinforced? Each of these will be influential in positive changes.

By understanding our food preferences (our choice of one food over another, e.g. steak over chicken) we can better understand how our eating habits and taste preferences (one taste over another, e.g. savoury foods over sweet foods) are formed, as well as how to work with them.

We should also keep in mind that liking and wanting are two different things. You can *like* sugar, but after your fourth chocolate biscuit you may not *want* any more. It also seems that liking is comparatively easier to amend than wanting, which appears to be more deeply ingrained in us.

How does taste work?

The palate seems able to detect so many subtle flavours in food and drink, but there are actually only a few distinct taste sensations. Our taste buds can pick up, sweet, bitter, sour, salty and umami (savoury). Fat, on the other hand, is believed to be distinguished by its texture.

It also appears that our acuity to taste (taste sensitivity) affects how we accept

new foods. For example, it is likely that picky eaters who have a high taste acuity will be less likely to adjust to new foods, whereas the rest of us who have a lowered taste sensitivity respond more favourably to new foods and tastes. To some degree, therefore, we are fighting nature when we try to change some eating habits.

How are our main taste preferences gained?

When asked to be honest about their favourite foods (which have most likely contributed to them using your services), many gym members and personal training clients would list foods which we know to be high in sugar or sweeteners, salt and fat. Why is this?

THE PREFERENCE FOR SWEET IS INNATE

It appears our only innate taste preference is for sweet and that we are designed to reject bitter tastes. Some suggest that this is a survival mechanism to avoid ingesting poison. Potentially this helps to explain why many people appear to be averse to vegetables, particularly those that err on the bitter side.

OUR GREAT LOVE OF SALT

A liking for salty foods is something that we learn. It appears that newborns are not able to differentiate salty tastes, though they quickly learn this by about four months of age. In fact, it seems our love of salt is one of the quickest learnt preferences. It's handy to keep in mind that most (80 per cent) of our salt comes

from processed foods. Repeated exposure to salt and heavily salted foods throughout early life will very likely result in adults who also love salt.

The good news is that everyone can adjust to less salt and less salty tasting foods. Simply slowly reducing the salt, opting for low-salt foods and avoiding heavily salted products will quickly result in a readjustment of taste buds. A diet high in fresh foods rather than processed foods has clear benefits; before you know it your client can detect all sorts of fabulous tastes and they will balk at an overly salted meal. A word of warning though; while reducing salt intake can reduce *want* for salt, your client may still *like* the stuff, making it easier to revert to old habits.

WHY IS FATTY FOOD SO HARD TO GIVE UP?

Fat, really, is in a league of its own! Our preference for fatty foods appears to be learnt in a similar fashion to salt; however, our ability to detect and react to fat levels in food is quite different. And, while we are able to adjust to a diet lower in fatty tastes, we appear to find it difficult to sustain these diets. It seems that while our taste perceptions can adjust, our want and love for fatty foods lags behind. It may take some time before our love of fat is extinguished sufficiently for us to make a permanent change in our eating habits, and for it to be one that we truly enjoy. This might explain why, after a sustained high-fat diet, clients switching to healthy options can find them a little on the 'dim' side taste-wise.

Changes to fatty food preferences need to involve a shift of enjoyment to tasty, healthful foods. We also know that the first six months of a change to a diet is the critical time and success is more likely if a person has made it past the six-month point. Making such shifts and the decisions that go along with them are far easier said than done as it is likely we are fighting very ingrained thinking patterns.

THE INFLUENCE OF 'GOOD TASTING FOOD'

You have probably heard clients say 'fat tastes good' and argue that is why they love fatty foods so much. Strictly speaking, however, this is not true – after all, there wouldn't be many of us who would say a tablespoon of butter tastes good. It is a little more complex than that: fat gives food improved palatability, which we associate with a positive experience.

'Palatability' sounds a simple term; logically one would assume it refers to how appealing a food or meal is. Actually, it is far more complex than that. Palatability of a food relates more to the hedonic or pleasurable experience that a food or a nutrient such as fat creates within us. The level of pleasure we gain from a food will depend on many things, including brain chemistry (specifically opioid levels), who you are eating with, the atmosphere, the reason you are eating and so on. Palatability can also be learnt and, in fact, it seems it can override our natural cues of hunger and satiety (fullness). This might explain why some clients can easily overeat indulgent foods.

Interestingly, palatability of foods is greatest when we are deprived of the food and is lowest after we have eaten it. Doesn't that just make perfect sense of all those times when you gave in to a dessert you were craving, only to feel afterwards that the anticipation was better than the experience? Still, we do this time and time again, which brings us back to *liking* and *wanting* being quite different. While you can reduce your liking of something, the wanting still remains a salient factor. Research seems to suggest that wanting is not easily down-regulated because it may be governed by processes beyond our mere physiology. Just how this works is not as yet understood, though it is likely that our 'higher order processes', such as our emotions, are involved.


How much control do we have over our food intake?

You might be surprised to find out that it appears the amount of effort required to restrain ourselves from eating when food is present is substantial. Further, it appears the effort required to sustain this inhibition is more than most of us can cope with.

It seems even our personality characteristics influence our success with healthy eating. A 20-year follow-up study in the UK¹ found that adults who as children had a stronger self-belief, had lowered risk of obesity, overweight, psychological distress, better self-reports of health, and were more likely to engage in physical activity.

Potentially, this helps explain why it is so difficult for some to sustain a diet and why more restraint is required in order to do so. It may also be possible that failure to sustain a diet is not a consequence of a lack of willpower. Rather, it may be due to the strength of automatic eating behaviours and the impact of internal states, which influence the effect of fast, accessible food on our food intake.

The take home message

Understand what eating habits you are dealing with, work with your client to 'unwind' them and encourage your clients to enjoy their food, favour the fresh stuff and to flavour dishes naturally. 



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¹Locus of Control at Age 10 Years and Health Outcomes and Behaviors at Age 30 Years: The 1970 British Cohort Study; Gale, Catharine; Batty, David; & Dreary, Ian. *Psychosomatic Medicine* 70:397–403 (2008)