

# Fast food & takeaways



## If it's so full of crap, why does it taste so good?

### Smells great

Aroma can be responsible for up to 90% of foods flavour. The act of drinking sucking or chewing a substance releases its volatile gasses. They flow out of the mouth and up the nostrils or up the passageway at the back of the mouth to a thin layer of nerve cells called the olfactory epithelium. Located at the base of the nose (right between the eyes) the brain combines the complex smell signals from the olfactory epithelium with the simple taste signals from the tongue (The tongue can only distinguish around six basic tastes), and assigns a flavour to your mouth and decides if it's something you want to eat. Clearly our sense of smell developed to avoid us from poisoning ourselves, and plays the major role in determining what it is that we put in our mouths.

### It's a learning thing

A person's food preference is formed during the early part of their lives, rather like our personalities, through a process of socialisation. Toddlers can learn to like almost all edible food depending upon what the people around them eat.

The flavours of childhood foods seem to have an indelible mark upon us and adults often return to them without knowing why. These "comfort foods" become a source of pleasure and reassurance; a fact that food manufacturers and fast food outlets work hard to promote. Childhood memories of happy meals can translate into frequent adult visits.

### Enter the flavour industry

The flavour industry emerged in the mid nineteenth century as processed foods began to be manufactured in a large scale. Recognising the need for flavour additives, (mainly lost during the processing, packing, dehydrating and freezing process), the early food processors turned to perfume manufacturers who had years of experience working with essential oils and volatile aromas. The American flavour industry is worth 1.5 billion dollars. That's one thousand million pounds.

People usually buy food first time around because of advertising and packaging – repeat purchases are mainly driven by taste. Our noses are more efficient than any machine yet invented and can detect smells as low as three parts per trillion 0.000,000,000,003. Complex aromas such as coffee or roasted meat may be composed of volatile gasses from as many as 1,000 different chemicals. The chemical responsible for the dominant flavour in red pepper can be tasted in amounts as low as 0.02 parts per billion. One drop is sufficient to add flavour to five full size swimming pools.

### The flavour found in a Burger King strawberry milk shake contains the following ingredients:

Amyl acetate, amyl utyrate, amyl valerate, anethol, anisyl formate, banzyl acetate, benzyl isobutyrate, butyric acid, cinnamyl isobutyrate, cinnamyl valerate, cognac essential oil, diaceryl, dipropyl ketone, ethyl acetate, ethyl amyl ketone, ethyl butrate, ethyl cinnamate, ethyl heptanoate, ethyl heptylate, ethyl lactate, ethyl methylphenylglycidate, ethyl nitrate, ethyl propionate, ethyl valerate, heliotropin, hydroxtphrenyl-2-butanone, ionone, isobutyl anthranilate, isobutyl butyrate, lemon essential oil, maltol, 4-methylacetophenone,, methyl anthranilate, methyl bonzoate, methyl cinnamate, methyl heptine,carbonate, methyl naphthyl ketone, methyl salicylate, mint essential oil, neroli essential oil, nerolin, nerylisobutyrae, orris butter, phenoethyl alcohol, rose, rum ether undecalactone, vanillin, and solvent.

52 Chemicals in total.

From "Fast food Nation" by Eric Schlosser

### Mouth feel ???

The flavour according to "flavourists" must be built in conjunction with the mouthfeel of the food. Mouthfeel can be adjusted through the use of various fats, gums, starches emulsifiers and stabilizers; in fact a whole new generation of chemicals to make the food feel the way we want it to feel.

The "Universal TA-XT2 Texture Analyser" is an artificial mouth developed where else but in the USA. It analyses 25 different qualities from various probes, which include: rate, bounce, creep, breaking point, density, crunchiness, chewiness, lumpiness, rubberiness, springiness, slipperiness, smoothness, softness, wetness, juiciness, spreadability, springback and tackiness. Mind boggling processes are combined with industry chemicals to give highly processed foods the desired "mouthfeel"!

### Another major consideration

Do consider also the way that fast food is prepared. Some less scrupulous franchisees are likely to not follow the company guidelines on oil usage. Re-heating oil at temperatures required for deep-frying damages the oils and oxidise them creating "trans fats" or "trans fatty acids". The more the oil is reheated, the more the production of dangerous trans fats, which when eaten, become potent free radicals attacking healthy cells throughout the body. What may start off as healthy polyunsaturated oil on entering the fryer, may eventually become a free radical bonanza by the time you purchase your order.

### Some High Street Nutritional facts

1. **Burger** Quarter-Pound Cheeseburger, Large Fries, 16 oz. soda (*McDonald's*)

<b><i>This meal:</i></b>	<b><i>Recommended daily intake:</i></b>
1,166 calories	1,800-2,400 calories
51 g fat	No more than 50 -70 g
95 mg cholesterol	No more than 300 mg
1,450 mg sodium	No more than 1,200mg

2. **Pizza** 4 slices Sausage and Mushroom Pizza, 16 oz. coke (*Domino's*)

<b><i>This meal:</i></b>	<b><i>Recommended daily intake:</i></b>
1,000 calories	1,800-2,400 calories
28 g fat	No more than 50 -70 g
62 mg cholesterol	No more than 300 mg
2,302 mg sodium	No more than 1,200mg

3. **Chicken** 2 pieces Fried Chicken, fries, Corn-on-the-Cob, 16 oz. coke (*KFC*)

<b><i>This meal:</i></b>	<b><i>Recommended daily intake:</i></b>
1,232 calories	1,800-2,400 calories
57 g fat	No more than 50 -70 g
157 mg cholesterol	No more than 300 mg
2,276 mg sodium	No more than 1,200 mg

From Department of health guidelines

## EATING ON A BUDGET

- Supermarket own brands
- Special offers
  - can save money as long as don't eat more because its there.
- Seasonal fruit and veg - NHS 5 a day web site will tell you fruit and veg that's currently in season.
- Freezing food
  - could be food bought in bulk eg special offers
  - leftovers from a meal
  - batch cook soups, stew, chilli, Bolognese etc and freeze individual portions
  - You can store meat and fish in the freezer for up to 3 months although check product guidelines. Wrap individual portion sizes in cling film.
  - To freeze vegetables blanch them and plunge into ice cold water then freeze. Frozen fruit can be a bit mushy but its fine for baking and cooking.
  - If a recipe has wine in, instead of opening a bottle each time you need a splash for cooking, save any leftovers in an ice cube tray and just pop one into a dish when required.
  - Chop and freeze herbs on a flat baking tray. Then empty the frozen shards into freezer bags and use as required.
- Use up leftovers
  - eg buy a whole chicken and cook for Sunday lunch. Use leftover meat for sandwiches the next day. Or could use leftovers for a chicken pasta dish. Boil the carcass for stock for the base of the soup.
  - Check out web site [www.lovefoodhatewaste.com](http://www.lovefoodhatewaste.com)
  - Use leftover cooked veg and meat to make a soup

# Eating Out

## INDIAN

### Healthier Choices

Plain boiled rice  
Chicken or meat tikka, dahl and dry or veg curries  
Naan bread without butter  
Tandori chicken  
Oven baked veg samosas  
Eat minimal amounts of sauces  
Wholemeal chappati

### Unhealthy choices

Deep fried popadoms  
Meat or chicken dansak, korma or madras  
Fried samosas and onion bhajis  
Chappati puri or paratha made with fat  
Pilau rice (around 650 kcals per portion)

## CHINESE

### Healthier choices

Clear veg soup  
Chicken, veg or prawn chop suey  
Mix veg/Stir fry veg, seafood or chicken  
Plain rice and noodles  
Steamed dishes, tofu

### Unhealthy choices

Duck dishes, sweet and sour pork/chicken (battered)  
Prawn crackers, deep fried options, fried noodles and rice  
Spring rolls

## ITALIAN

### Healthier choices

Pasta with tomato based sauces or seafood sauces  
Risotto, grilled chicken or fish  
Tortelloni with ricotta cheese

### Unhealthier choices

Avoid the added extras eg garlic bread and parmesan cheese  
Give salami, pepperoni, bacon and extra cheese toppings a wide berth.  
Avoid creamy sauces  
Avoid spaghetti Bolognese or carbonara