Coca-Cola, Oreo, Kellogs and many more food giants. They all hooked us. In their queste of selling processed foods to the masses, their 3 basic ingredients to play with are always the same: salt, sugar and fat. These are the nutrients that drive our food cravings and make us beg for more. But what are the health costs of these ingredients? And do food manufacturers really care?
Let’s name sugar, fat and salt the 3 “devils” of processed foods:

**DEVIL N°1: SUGAR**

That’s right.

**Our bodies are hardwired for sweets.**

Why?

Because sugar gives us an immediate energy shot.

Since our brains are highly energy conservative by nature, it craves quick energy. And sugar provides that. The pleasure centers of the brain light up. It’s that little “oooh” moment you feel in your mouth. The taste buds is sending signals to the pleasure centers of the brain. Energy is received. It’s part of our biology.

Researchers however found out that children have a stronger preference for sweetness than adults.

**But why would children be more fond of sweets?**

First of all, because children are growing up fast and therefore need a lot of quick energy. Secondly, humans didn’t evolve in an enviroment where there were a lot of sweet foods, so the reward today is an extra excitement. Thirdly, sweets just make children feel good.

**As a result, children have often become the main target of the food giants.**

For that cause, food manufacturers pay chemists and scientists to determine the “bliss point” for their sugary products. The bliss point is defined by Moss as the exact amount of sweetness that makes food and drinks most enjoyable. In other words, it is the optimum level of sugar at which sensory pleasure is maximal. And this declares why a lot of kids can’t stop eating Oreo cookies. Or drink coke. Or whatever processed food/drink it may be. Food manufacturers just became really good at creating the biggest crave possible for their processed foods.

**In addition to that, food giants often add salt and fat to make their foods even more irresistible. They play on our biological basis, time after time.**

Did you ever feel full or satiated very quickly after eating the same singly flavoured food? This is called sensory-specific satiety and it is strategically outplayed by food manufacturers. By adding multiple alluring ingredients to their foods, people are more likely to overeat.
SO... WHAT’S THE COST OF SUGAR?

→ Obesity is a big one. Again, studies show that especially children seem to be vulnerable in this case.

→ Diabetes

→ Tooth decay. Again, children being the main sufferers.

The question is:

Do food manufacturers really care about the health of their customers?

If we may believe the author, Michael Moss: not really.

Take the CEO of Coca-Cola as an example. He didn’t care what he sold, he only taught about selling, and the selling has always been good.

As Michael Moss argues: “These companies (Coca-Cola, Kellogs, Oreo, etc.) are highly competitive, and would do anything to win consumers over. Excessive marketing strategies – often targeted to young adults - prove this again and again. Health has never been their primary concern.”

DEVIL N°2: FAT

The second ingredient on which the processed food industry relies heavily is called fat.

Moss argues that fat is as strong as sugar – and maybe even stronger – in evoking an amazing allure for processed foods. Just like sugar, fat produces strong reward effects in our brains.

To be clear: fat is not all bad.

There are 3 types of fat: the ‘healthy’ or unsaturated fats, which we need in our diet and can be found in avocado’s, nuts, seeds, etc. Then, there are the saturated fats, which can be found in meat, cheese, ice cream, etc. These should be consumed in moderation. The last type of fat is trans fats. These can be found in all fried and processed foods, from fries to meat balls. These should be avoided at all.

Anyway, Moss argues:

“What makes fat so surprisingly powerful in evoking cravings is not necessarily its taste, but rather its mouthfeel or texture.”

Food manufacturers simply love adding fat to their processed foods, just because it provides a sticky, gooey mouthfeel, allowing for even higher amounts of pleasure.
Remember that last time that you ate that peanut butter, and the creamy paste just stayed for a while in your mouth? Didn’t it feel really good? That feeling!

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However, unlike sugar, fat’s public image has been horrid throughout the years. It was – and still is – considered an “energy collosus”. It packs 9 calories in each gram, more than twice the caloric load of either sugar or protein. Michael puts it brilliantly: “Since fat is so energy dense, the body sees fat in food as the body’s best friend. The more fat there is in food, the more fuel the body can have for future use by converting the fat to body fat.”

But that didn’t hold food manufacturers back at all. To the contrary, they started to use aggressive marketing tactics to promote their “low-fat” and “low-calorie” variations of products to make it seem that they have cut back on the fat. In reality, nothing was far more from the truth.

Unlike sugar, fat does not know “a bliss point”. That means: the more fat you add to a product, the more you’ll tend to like it. This is why the fast food manufacturers started to add processed cheese and meat as an additive to all their foods, from pizza’s to lasagna’s and sandwiches.

The real issue began when processed food manufacturers discovered that fat in combination with sugar provided a stronger allure than both ingredients individually could’ve ever provided. Even stronger: the added sugar in potatoe chips, cookies, soups, cakes, etc. let consumers perceive these products as ‘low in fat’. The truth is that half of their caloric load comes from fat, and not sugar.

Now, you might ask yourself:

“What did the government say to all this?”

The answer is complicated.

You must know that the government has 2 major – and often conflicting - interests here: the consumers and their health on one side, and the $1 trillion industry of food manufacturers on the other side.

Among Michael Moss, the government (in this case: the Department of Agriculture) served more as a partner of the food industry to sell more processed foods – primarily fatty foods such as red meat and cheese - than it did helping consumers eat more healthy.

Food industry lobbyists made the government agencies their partners in crime to get more fatty products into the hands of consumers. Even stronger, the government often funded marketing campaigns to promote cheese and beef with US taxpayers’ money. The rationale was that the US camped with an over-supply of dairy products around 1980 (cows, and therefore meat and cheese) which it wanted to see solved by selling more of it to the masses.

It is a little ironic that this over-supply was due to the awareness that saturated fat (which is highly present in meat and cheese) was causing damage to the human body. The US processed food industry and the government countered this with packaging meat and cheese in processed foods, increasing it’s allure for consumers. And it worked.
But the true danger comes into play when another ingredient is added...

**DEVIL N°3: SALT**

As Michael Moss explains:

“**People love salt. Among the basic tastes – sweet, sour, bitter and salty – salt is one of the hardest to live without. And it’s no wonder. Salt, or sodium chloride, helps give foods their taste appeal – in everything from bacon, pizza and cheese to french fries, salad dressings and baked goods.**”

**But why would people love salt so badly?**

Moss argues that part of our love for salt is—again—hardwired in our evolutionary biology. When everything lived in the ocean, animals had no problem getting the amount of sodium they needed to survive. However, when climate change appeared and the pre-human species started to evolve on land, they were almost forced to keep this urge for salt in order to survive.

Remarkable, however, is that research shows that babies **are not born liking salt**. They are born liking sugar and fat, but not salt. This means that they have to taught to like the taste of salt, which is exactly what the processed food industry does.

The processed food giants simply love to add salt to their products, not only because of its **great taste** but also because it is a **great fixer**. Salt can delay the onset of bacterial decay, bind other ingredients, and blend mixtures that otherwise would come unglued, such as protein and fat molecules in processed cheese. Just like fat, salt also has the ability to **mask other flavors** (such as bitterness) and therefore make it more desirable. Examples are cereals, cheese, and other baked goods.

Anyway, for those of you who think salt is absolutely bad and should be avoided at all time:

**You’re wrong.**

Salt contains sodium and a little bit of sodium is a vital part of a healthy diet.

However, studies show that American’s sodium intake goes way beyond what’s needed. The result is called **hypertension**, or high blood pressure, which is still a rising phenomenon in the US and can lead to heart disease.

**So where is all this salt coming from?**

The biggest enemy in this case is not your saltshaker, Moss argues, but the **processed foods** people buy at the supermarket. Research discovered that more than **75% of salt consumption came from processed foods**. The saltshaker only contributed to 6% to the total salt intake.
CONCLUSION

The issue for most of the processed food companies in creating healthier products is that their shareholders want to see return. Whether the managers add salt, sugar, or fat. It doesn’t really matter, as long as the items sell. And the food that sells is the food that creates maximum allure, which the combination of salt, sugar and fat provides.

As Moss explains:

“It is simply not in the nature of these companies to care about the consumer in an empathic way. They are preoccupied with other matters, like crushing their rivals, beating them to the punch. Making money is the solely reason they exist.”

That’s why food lobbyists get paid, i.e. to defend these companies’ use of the ‘devil’ ingredients rather than unhook them from it. This - together with brilliant marketing efforts and scientists calculating bliss points to create maximul allure - made these products so appealing - and therefore sell like crazy.

Awareness is the key. These products may be over tempting, but at the end, you still have the power to decide what you eat and how much.