The Global framework for health related food taxation – by Raghavendra Guru Srinivasan

Abstract: Overeating leads to obesity, and this work brings out the fundamental framework of overeating, the effects of food design/formulation, and the dynamics of a best practice. The United Nation’s approval of Yoga (Indian medicine) is an opportunity to analyse the dynamics of the practice that keeps an individual lean & healthy which can be incorporated in the modern healthcare systems. In this direction, overeating & reduction in consumption are analysed for basic understanding, and, if necessary, for constructing appropriate regulation for food. A regulatory framework will help countries to effectively match the tax revenue from food companies against the social costs of the concerned businesses.

Background: In addition to hunger & thirst, food is also consumed for the sake of consumption experience. Food companies generally source agricultural produce and process (product designing/formulation) it into food products. The food designing generally creates new consumption experience(s) and there is overeating if consumption is due to desire for consumption experience. The consumption experiences are sensations, chewing experience, full stomach bliss etc.

The global Issue: Overeating is a global issue that leads to obesity or other non-communicable diseases, and according to the Institute for health metrics and evaluation, in 2010, diet risk was the top health risk in the world. Economic growth has improved the purchasing power of families and the role of food preparation has been shifting from families to businesses. There is change of focus with the shift in food preparation to business as higher consumption translates into higher profits.

Nationally, there are two options, one companies can voluntarily recognise the problem and reformulate the products. The second option is to tax products to discourage the consumption. Food businesses have managed to avoid such measures as it may affect their performance.

a. Campbell Soups voluntarily reduced the salt content in their soups. After the reformulation, the sales dropped and as a result the company decided to break its commitment. This is a classic example of the role of food design in increasing/decreasing food consumption.

b. Further reversal of food taxes due to industry lobby is common in United States even before the obesity epidemic. There are more than 10 instances of reversal of food taxation in United States. For example, in 1997, Coca cola signed a contract with Louisiana government to build a bottling plant worth $50 million and in return managed to get food taxes repealed. On the other hand, in the case of portion cap rule (large soda cup ban) in New York, the court repealed the provisions on the ground that the city council exceeded its regulatory authority.

Internationally, the multinational food companies that cause health problems accumulate profits elsewhere while the local governments have to pick up the costs of public health. The above problem is similar to base Erosion and profit shifting where it costs the country in terms of healthcare expenses without adequate matching revenue. The deterioration in human capital due to health conditions also results in low productivity.

Second, governments around the world have proposed to tax various food products they include soda tax, sugar tax, high salt and high sugar tax, junk food tax, pastry tax, etc. Even after taxing food products there is still discussion on food supplied in large quantities, and promotions to children in the form of gifts and toys. There is a need for comprehensive global framework for food taxation.
Globally, the role of food design inducing excessive consumption is to be analysed for taxation. The problem is becoming complex as the food companies have positioned themselves as part of solution by fortifying their products with vitamins. We are in search of an authority like G7 to effectively manage this global issue.

**A best practice: Mechanism of reduction in food consumption**

1. Yoga reduces stress and reduces the chances of any stress induced food consumption.
2. Research evidence indicates that an Individual is in trance like state in binge eating. In such case bringing consumer out of trance like state by creating self-awareness through yoga practice could be an appropriate option.
3. Theoretical frameworks of yoga practitioners reveal that there are two simple rules of thumb among yoga practitioners that lead to good habit formation. (a) People are encouraged to eat food up to half stomach and drink water for quarter stomach. Then the fourth quarter is left empty for air or (b) intense practitioners of yoga eat only once a day while moderate practitioners eat twice a day. Theoretical frameworks of yoga practitioners also states that consuming food 3 times can cause disease conditions and that four or more times a day may reduce the lifespan of an individual.

**Understanding consumption experience:** In food consumption the food interacts with the sensory organs & body and creates a consumption experience which may or may not be liked by an individual. The sensory consumption experiences that are experienced by Tongue, Nose, Ears, Eyes, Skin are grouped as Taste, Smell, Sound, Visual attraction and Temperature respectively.

In addition to the sensory consumption experience there are experiences of the body. For example

1. Full Stomach bliss experienced after the consumption of food in big portions.
2. Fizzy experience of sodas.
3. Special experience of the products like Menthol, Monosodium Glutamate and others

Further, Food choice may also be due to influences over the mind of a particular person.

a. Purchase of food products due to price offers which may lead to excessive consumption.

b. Traditional practice of not wasting any food on the plate. Excessive consumption is possible if the food served generally exceeds the requirement.

c. Loyalty points offered by big retailers may influence a decision.

d. In case of sick people, Consumption of particular range of food items as prescribed by dietician.

In sum, the consumption experiences can be grouped under the head of Senses, Mind and Body. One of the stages of Yoga practice is the called pratyahara and in this stage the practitioner is believed to have gained mastery over the senses and have reasonable control over mind. Food consumption normally comes down as one advances in yoga practice.

**Closing the gaps in governance with fat and tickle tax:** The fat & tickle tax idea introduced looks at the mechanisms through which product design/formulation can lead to unhealthy eating behaviours/patterns of consumption/preferences for unhealthy foods. This is important in understanding how/why we would expect food policies to work. A sample of applicability of fat & tickle tax is given below.
<table>
<thead>
<tr>
<th>Particulars</th>
<th>Tickling factor</th>
<th>Tickle tax</th>
<th>Fat tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>High salt in ready to make soups</td>
<td>salty taste</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Salted Crisps, Salted biscuits Roasted &amp; salted nuts</td>
<td>Munching experience, salty taste</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Salted &amp; Flavoured Crisps</td>
<td>Munching experience, Flavours, Salt additive</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Ajinomoto</td>
<td>Special additive effect</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Soft drinks</td>
<td>Fizzy experience, unique product formula, sugary taste, chilled servings and caffeine</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ice cream</td>
<td>Frozen servings, sugary taste and colouring</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chocolates</td>
<td>Sweet taste, colour, chewing experience</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Big portions of food &amp; drinks</td>
<td>Desire for Full stomach bliss</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Quantity discount</td>
<td>Desire for Full stomach bliss / Influencing mind in decision making</td>
<td>Yes</td>
<td>Possible</td>
</tr>
<tr>
<td>Price offers</td>
<td>Influencing mind in decision making</td>
<td>Yes</td>
<td>Possible</td>
</tr>
</tbody>
</table>

Table source: http://ssrn.com/abstract=2010984

- Thus tickle tax could be multidimensional. Just as the manufacturers’ approach is multi-dimensional. Tax rates would be based on each tickling factor which would mean that higher the tickling higher would be the taxation. Tax rates for the tickling factor may be determined based on effect of the tickling factor.

**Conclusion:** Big food companies engaged in food design could be held accountable for the social costs of their operations. Taxes will discourage business behaviour of tickling food consumption. Funds raised can fund both disease prevention and the cure for conditions arising out of overeating.

**Reference**

2. “Overeating is Not About the Food”: Women Describe Their Experience of a Yoga Treatment Program for Binge Eating by Shane McIver, Michael McGartland, Paul O’Halloran [http://qhr.sagepub.com/content/19/9/1234.short](http://qhr.sagepub.com/content/19/9/1234.short)
3. Verse (Sloka) 58 of the book Hatha yogapradipika of Svatmarama with commentary by Brahmananda.

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