



Vegetarian Capsules

The case for vegetarian capsules in India

Beauty Without Cruelty

Pune, INDIA

Capsules



Gelatine

- Made of material synthesised from animal tissue (eg., hooves, bones)
- Process: boiling to a gel, then cooling in water

Cellulose

- Made from material synthesised from plant cellulose (of trees like pine and poplar)

Cellulose and Gelatine capsules: a comparison

Property	Gelatin capsules	Cellulose capsules
1. Source	Slaughtered animals	Plants (Pine, poplar trees)
2. Storage	Susceptible to ambient heat	Less susceptible to ambient heat
3. Dissolution	Difficult below 30 deg C (ie, needs to be taken with warm water) ¹	Soluble down to 10 deg C (ie, can be taken with warm OR cold water) ¹
5. Cost	Cheaper to make	Currently more expensive to make
Etc.	Some pros, some cons ²	

¹ Chiwele I., Jones B. E., Podczeck F., *The shell dissolution of various empty hard capsules*, *Chem Pharm Bull (Tokyo)*, 48 (7), p951-6, Jul 2000

² Moawia Al-Tabakha, *HPMC Capsules: Current Status and Future Prospects*, *J Pharm Pharmaceut Sci* 13(3), p428-44, 2010

Capsules: a consumer perspective

- ▶ Most consumers are unaware of the source of their medication.
- ▶ The ignorance of the source of the medicine one ingests is wrongly interpreted as a willingness to accept any source or to be kept in the dark. Neither interpretation is correct.
- ▶ The historical and cultural sensitivity of Indians towards the animal/plant source of any ingested material is well-known. Examples:
 - ▶ The Indian Mutiny of 1857 took place over (among other things) the issue of having to bite into fat-greased ammunition
 - ▶ Gandhiji had refused intake of meat-based broth even for saving his own life.
 - ▶ People objecting to animal fat as frying medium and eggs in glazing
- ▶ Government very commendably responded to that with the Vegetarian/Non-vegetarian labelling requirement of food products. It is internationally known for this bold step and greatly appreciated by its people. **Our gratitude to the Government of India for it.**

contd...

Capsules: a consumer perspective

- ▶ It is, however, assumed wrongly and without basis that Indian consumers do not care about the source of “non-food” ingestibles. Today many consumers shun ethically tainted materials - edible or non-edible - like varakh, leather, silk, and animal-derived or animal-tested cosmetics, and even experiences like circuses.
- ▶ It is wrongly assumed by government bodies that consumers “happily” consume whatever the doctor orders. Or that doctors happily order slaughter-derived medicines. Everyone is simple in ignorance.
- ▶ Media language¹ of labelling our efforts as “...imposing vegetarian alternatives upon people” is highly inappropriate and objectionable. Who is imposing upon whom?! Today non-veg capsule shells are being imposed upon vegetarians who would rather not take them.

¹ Sidharth Shankar, *Vegetative about vegetarian capsules*, p 8, Financial Express, Sat 24 June 2017

Significance of animal/ plant source

- ▶ Animal source (as in gelatine) implies obtaining from slaughterhouses. Connective tissue like bones, hooves is not possible to obtain except by killing the animals.
- ▶ Slaughterhouse death is deliberate, premeditated, cold-blooded, brutal.
- ▶ Indian consciences are highly tuned to this aspect of ethics. All its religions without exception prohibit killing and preach the sanctity of all life.
- ▶ Connective tissue is not a “by-product”. It is paid-for. Using any product of slaughter is to dip our hands in the blood of that animal.

Capsules: the choice in reality



Cellulose

- Virgin forests not cut for cellulose.
- Replenishable afforestation is a happy outcome
- Dignified occupations for people
- No cause for ethical complaint for *any* capsule consumer

Gelatine

- Huge suffering of animals.
- Unpleasant occupation of butchery forced upon people
- Capsule consumers forced to ingest ethically repugnant substance.



Our submission

- ▶ Everyone wants to recover when ill. Medicine is an important part of recovery today. But we would like to do so keeping our values uncompromised.
- ▶ Not causing suffering to animals (esp through slaughter) is an important part of India's cultural values. Not using products of slaughter is an related supporting principle. *No law should force the use of slaughter products upon people.*
- ▶ Alternatives exist!! Companies are already manufacturing plant-based capsules for nutraceuticals. **1. Allow plant-based capsules for medication also.**
- ▶ **2. Promote research and production of plant-based capsules** - since it is the **non-violent alternative**. More research will make it safer and more effective.¹ More production will bring down cost (the biggest bottleneck).
- ▶ In a transition to a fully plant-based capsule industry, allow people to make an informed choice *today*. **3. Make labelling of medicines compulsory**, like food, and *let people decide what to buy*: plant-based or gelatine-based capsules.
- ▶ When desired safety and efficacy levels are achieved in plant-based capsules, **4. declare a time-scale for capsule industry to completely switch over to a non-slaughter-based cellulose medium.**

If India doesn't do it, who else will?! Let us lead by example, not always only follow others'.

¹ Example of varakh: alternatives have come out despite reluctance to admit