

Betel quid/*Areca* use and Oral Cancer

AN and BQ - advocacy to prevent oral cancer and OSF - 10 points to summarize this public health problem

1. It's all about money...
2. Religion (whole dried AN is a Hindu Puja ritual item) is used to obfuscate the law and political opinion...
3. Culture plus addiction is a strong obstacle...
4. Too much regulation can result in a black market...
5. Research is starting to drive policy...
6. Food safety regulations are starting to be used effectively...
7. The definition of processed AN as "food" should be considered in research...
8. Unfortunately, AN culture is defined as a "chewing culture" and not a "food culture"...
9. Alcohol and coffee are both food... a good corollary...
10. Alcohol, coffee, tobacco, and areca nut are the four most commonly used addictive substances...

"Rice, the principal food crop, is grown along the western plain and in the south. In 2001, paddy rice production was 1,723,895 tons; brown rice, 1,396,274 tons. Taiwan's annual rice production exceeds demand; the island's per capita rice consumption has declined by over 50% since the mid-1970s due to changing diet preferences. ... Betel nuts have become Taiwan's second most valuable cash crop after rice. In 2001, betel nut production totaled 165,076 tons."

19 pounds of rice to each pound of areca. What is the cost of a pound of areca compared to a pound of rice?

Read more: <http://www.nationsencyclopedia.com/Asia-and-Oceania/Taiwan-AGRICULTURE.html#ixzz4fZzqcxFQ>

In the IARC Working Group, the final evaluation on carcinogenicity of areca nut was decided after a very spirited discussion during late in the evening on the last day. The assignment to the Group was to evaluate carcinogenicity of betel quid with tobacco, without tobacco and related compounds (smokeless tobacco was evaluated by a different Working Group published in a separate volume). After both evaluations were finalized as 'sufficient,' some of us proposed that areca nut should also be evaluated because of its public health implications. After some discussion and clearance from IARC staff, the Group agreed to consider evaluation of areca nut. As per IARC criteria, 'sufficient' label can be given only if corroborating human evidence is available; animal experiments and mechanistic laboratory findings alone do not merit 'sufficient' label. Data for areca nut was weaker than that of betel quid but the evaluation was based on following considerations:

The evidence for areca nut causing oral submucous fibrosis, an established precancerous condition, was quite strong.

There was one population Group, albeit small, that used areca nut by itself, without betel quid, did not smoke and did not use alcohol. This group comprised women of Indian origin living in South Africa.

There was good data on areca nut causing oral submucous in this group.

The incidence of oral cancer was high in this group compared to others groups in South Africa There were case reports, case series reports of oral cancer among these women who used areca nut.

There was no case-control study available directly linking areca nut use in this group with oral cancer.

Considering the entirety of evidence including laboratory evidence, the Working Group evaluated evidence of carcinogenicity of areca nut as 'sufficient'

>Prakash C. Gupta

Food safety has dominated the concerns of politicians as well as the public in recent years here in Taiwan, and probably elsewhere. The merchant who sold mixed gutter oil with olive oil has been put in jail. Last month, a trace of dioxin was found in eggs tested, and 600 million eggs were then destroyed. Incidentally, dioxin is a weak human carcinogen at best, and will take years or decades of exposure to have any effect. Food from East Japan coming from radiation-concerned areas is banned from imports. US pork fed with Ractopamine, a food additive to promote leanness widely used and consumed in the US, was also banned from importing. Hardly anyone has died from food safety. In contrast, BQ has never been questioned as a food safety issue, with thousands getting oral cancer every year, and, along with smoking, tens of thousands died prematurely here in this island. This is elephant in the living room, but we cared more about the infertility of the fleas. How can we get the public become interested? Somehow, we need to make BQ a sexy, mysterious or motivating issue. The public seemed to be showing a sign of fatigue toward these old, familiar issues, but could easily get excited about new, unfamiliar but low or negligible health issues. Smoking gets a lot more publicity than BQ for political reasons. BQ is an orphan. Media is not interested in whether BQ or AN is sufficiently carcinogenic, even though they have been well proven. An argument against this by opponents pointed to the nature of BQ as a voluntary action but egg consumption involuntary.

Science we acquired through hard research has not been effectively translated and communicated, a failed responsibility of the intellectuals.

>Chi Pang Wen

What about the carcinogenicity of AN alone, as consumed/chewed in Taiwan, where I believe your epi studies have shown it a proven causal agent for oral cancers, in the absence of tobacco, with arecoline the presumptive agent. Some of the discussion in this group seems to have questioned that link. Can you respond, please.

>Ellen Gritz

It would be totally unexpected and surprising if BQ alone could not cause oral cancer. The ability of BQ alone without smoking to cause oral cancer (16.9 times) is roughly five times that of smoking without chewing (2.9), when compared to those without either risk. Drinking is a major confounder and should be controlled.

>Chi Pang Wen