

Exploring saiga horn consumption in Singapore

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SUPPLEMENTARY MATERIAL 1 Questionnaire administered to 230 Chinese Singaporeans to investigate consumption of saiga horn products and awareness of the status of the saiga antelope *Saiga tatarica*.

Questionnaire number: Area:

TRADITIONAL CHINESE MEDICINE USE SURVEY

We hope to better understand what types of Traditional Chinese Medicine people consume and for what reasons, for a product survey.

All your answers will be anonymous and confidential. You are free not to answer any question or to stop the survey at any time. Are you happy to continue on this basis?

Please do not write your name, address or contact details anywhere on the form.

1. Gender
 - Male
 - Female

2. What is your age?

3. What is your nationality?

4. Ethnicity
 - Chinese
 - Malay
 - Indian
 - Other, *please indicate:*

5. What is your occupation?

6. What is the highest level of education you have completed?

- No schooling completed
- Primary school (ages 7-12)
- Secondary school (ages 13-19)
- Technical/vocational training
- Diploma
- Bachelor's Degree
- Master's Degree
- Doctorate (PhD)

7. Which of the following Traditional Chinese Medicine products have you consumed in the last 12 months?

Mark all that apply

- None
- Bird's nest
- Cordyceps
- Ginseng
- Ling Yang
- Ling Zhi
- Chicken essence
- Herbal tea
- Others, *indicate*:

8. Which of the following Traditional Chinese Medicine products have you purchased in the last 12 months?

Mark all that apply

- None
- Bird's nest
- Cordyceps
- Ginseng
- Ling Yang
- Ling Zhi
- Chicken essence
- Herbal tea
- Others, *indicate*:

LING YANG (SAIGA HORN) USE SURVEY

For the rest of the survey, we hope to better understand the consumption behaviour in relation to Ling Yang (saiga) and their products.

Your feedback will be of great help to us.

All your answers will be anonymous and confidential. You are free not to answer any question or to stop the survey at any time. Are you happy to continue on this basis?

These are some types of Ling Yang (saiga horn) products:



Have you consumed any of these Ling Yang (saiga horn) products before?

Have you consumed Ling Yang (saiga horn) in the last 12 months?

- Yes, I have consumed Ling Yang (saiga horn) in the last 12 months
(Proceed to SECTION A on page 6, if you marked this.)

- No, I have not consumed Ling Yang (saiga horn) products in the last 12 months
(Proceed to SECTION B on page 10, if you marked this.)

SECTION A: YES, I CONSUME LING YANG (SAIGA HORN)

A1. Which of these product types have you consumed?

Mark all that apply.

- Whole horn
- Tablet
- Shavings
- Powder
- Bottled (fresh)
- Bottled (supermarkets)
- Tea
- Others, *please indicate:*

A2. Have you consumed any of these products in the last 12 months?

Mark all that apply.

- Whole horn
- Tablet
- Shavings
- Powder
- Bottled (fresh)
- Bottled (supermarkets)
- Tea
- Others, *please indicate:*

A3. How frequently do you consume each type of saiga horn product?

Please write product type and choose only one option per product.

Product type 1:	Product type 2:	Product type 3:
Daily	Daily	Daily
Weekly	Weekly	Weekly
Monthly	Monthly	Monthly
Once every 4 months	Once every 4 months	Once every 4 months
Once per year	Once per year	Once per year
Not sure/prefer not to say	Not sure/prefer not to say	Not sure/prefer not to say

A4. Do you think your overall consumption has changed in the last 2–3 years, compared to previously?

Choose only one.

- It has increased
- It has decreased
- It has stayed the same
- I'm not sure

A5. IF you selected increased/decreased, please give up to 3 reasons for this increase/decrease in use.

Mark up to 3 that apply.

(Ignore this question if you answered 'same/not sure' in the previous question.)

- Availability of saiga horn products
- Effectiveness as a medicine
- Price of the products
- Elders/family purchased more/less for me
- Recommendations from others, *indicate: family, friends, healthcare professional*
- Hard to tell if consuming real or fake saiga horn, so I avoid it
- Others, *indicate:*
- Not sure/don't know

A6. What is the main health reason you consume saiga horn products?

Choose only one.

- Clear heatiness and release toxins (fevers/sore throat/etc.)
- Clear dizziness/headaches/blurred vision
- General health benefits
- Other, *please indicate:*
- Don't know/prefer not to say

A7. Where do you usually get saiga horn products?

Mark all that apply.

- At a franchise or chain store
- At a privately owned store
- From a private dealer (not a store)
- Family or friends
- Other, *please indicate:*

A8. Thinking about the last time you consumed saiga horn, what prompted you to do this?
Choose only one.

- I decided for myself
- Doctor's recommendation
- Vendor (shopkeeper)'s recommendation
- Family or friend's recommendation
- Elders/family bought it for me
- Other, *please indicate:*

A9. If you have (in the last 12 months) chosen to use any of these alternatives to saiga horn, what was it?

Mark all that apply.

- Synthetic (e.g. Panadol, Paracetamol)
- Natural – animal source (e.g. other horns)
- Natural – plant source (e.g. herbal tea)
- Other, *please indicate:*
- Not sure/don't know
- I did not use any alternatives (*Ignore next question A10 if you picked this.*)

A10. Why did you choose to use it instead of saiga horn? Please give up to 3 reasons.

Mark up to 3 that apply.

- More available than saiga horn
- More effective than saiga horn
- Cheaper than saiga horn
- Elders/family bought it for me
- Recommendations from others, *indicate: family, friends, healthcare professional*
- Hard to tell if consuming real or fake saiga horn, so I avoid it
- The harvest method of saiga is cruel/saiga are endangered
- Others, *indicate:*
- Not sure/don't know

A11. How would any of the following factors affect your consumption of saiga horn products?

Choose only one per line.

If the price of saiga horn increased (e.g. +20%), I would:

- Consume more No change Consume less
 Stop consuming Don't know

If the price of saiga horn decreased (e.g. -20%), I would:

- Consume more No change Consume less
 Stop consuming Don't know

If I didn't know anyone else who consumed saiga horn products, I would:

- Consume more No change Consume less
 Stop consuming Don't know

If there was no legal sale of saiga horn products any more, I would:

- Consume more No change Consume less
 Stop consuming Don't know

If I learnt that it threatens the survival of saiga in the wild, I would:

- Consume more No change Consume less
 Stop consuming Don't know

If I learnt that the harvest of saiga horn was cruel, I would:

- Consume more No change Consume less
 Stop consuming Don't know

Other factor, *please indicate*:

- Consume more No change Consume less
 Stop consuming Don't know

Proceed to SECTION C on page 13 (Saiga status and use)

SECTION B: NO I DO NOT CONSUME LING YANG (SAIGA HORN)

B1. You haven't consumed saiga horn products in the last 12 months, but did you in the past?
Choose only one.

- Yes
- No
- Not sure/Don't want to say

B2. If yes, when was the last time you consumed a saiga horn product?
Choose only one.

If no, please proceed to question B4.

- In the last 2-3 years
- In the last 5 years
- In the last 10 years
- More than 10 years ago

B3. If yes, why did you stop consuming it? Please give up to 3 reasons.

Mark up to 3 that apply.

If no, please proceed to next question.

- No use for it
- Saiga horn not easily available
- Saiga horn not effective as a medicine
- Saiga horn expensive
- Elders/family stopped buying it for me
- Recommendations from others, *indicate: family, friends, healthcare professional*
- Hard to tell if consuming real or fake saiga horn, so I avoid it
- The harvest method of saiga is cruel/saiga are endangered
- Others, *indicate:*
- Not sure/don't know

B4. If no, why have you not consumed saiga horn products? Please give up to 3 reasons.

Mark up to 3 that apply.

- No use for it
- Saiga horn not easily available
- Saiga horn not effective as a medicine
- Saiga horn expensive
- Elders/family don't buy it for me

- Recommendations from others, *indicate: family, friends, healthcare professional*
- Hard to tell if consuming real or fake saiga horn, so I avoid it
- The harvest method of saiga is cruel/saiga are endangered
- Others, *indicate:*
- Not sure/don't know

B5. Which of these saiga horn product types have you seen in the last 12 months?
Mark all that apply

- None
- Whole horn
- Tablet
- Shavings
- Powder
- Bottled (fresh)
- Bottled (supermarkets)
- Tea
- Others, *please indicate:*
- Prefer not to say/don't know

B6. Where do you most often see saiga horn products?
Mark all that apply.

- I don't see them
- At a franchise or chain store
- At a privately owned store
- From a private dealer (not a store)
- Family or friends
- Other, *please indicate:* _____
- Prefer not to say/don't know

B7. What is the main health reason why people consume saiga horn products?
Choose only one.

- Clear heatiness and release toxins (fevers/sore throat/etc.)
- Clear dizziness/headaches/blurred vision
- General health benefits
- Other, *please indicate:* _____
- Don't know/prefer not to say

B8. If you have chosen (in the last 12 months) to use any of these alternatives to saiga horn, what was it?

Mark all that apply.

- Synthetic (e.g. Panadol, Paracetamol)
- Natural – animal source (e.g. other horns)
- Natural – plant source (e.g. herbal tea)
- Other, *please indicate:* _____
- Not sure/don't know
- I did not use any alternatives (*Ignore next question if you picked this*)

B9. Why did you choose to use it instead of saiga horn? Please give up to 3 reasons.

Mark up to 3 that apply.

- Didn't consider using saiga horn
- More available than saiga horn
- More effective than saiga horn
- Cheaper than saiga horn
- Elders/family stopped buying it for me
- Recommendations from others, *indicate: family, friends, healthcare professional*
- Hard to tell if consuming real or fake saiga horn, so I avoid it
- Others, *indicate:*
- Not sure/don't know

Proceed to SECTION C on the next page (Saiga status and use)

SECTION C: (LING YANG) SAIGA STATUS AND USE

C1. Are there any regulations about consuming/buying/selling saiga horn?

Choose only one.

- Yes
- No
- Not sure/don't know

C2. If yes, what are these regulations?

Choose only one.

- Cannot buy but can consume
- Can buy only from licensed shops
- Can buy only licensed products
- Can sell only licensed products
- No regulation
- Don't know

C3. If there are regulations, why are they in place?

C4. What is the status of the saiga in the wild?

Please tick the one statement that best describes it.

- It is found in several countries, in large numbers, and not declining
- It is found only in one country, in large numbers, and not declining
- It is found only in one country, in small numbers, and not declining
- It is found in several countries and all populations are declining
- It is found in several countries, some populations are declining and some are not
- I don't know

C5. How are saiga horns harvested?

Choose only one.

- Saiga are bred in farms and the horns are taken off when they are grown large enough
- Saiga are bred in farms and killed for their horns and meat when they are old enough
- Saiga are caught from the wild and taken to market alive, where each part is sold separately
- Saiga are killed in the wild and the horns and meat are taken to market
- Saiga are caught in the wild, their horns are taken off and then they are released
- I don't know or don't want to say

C6. Do you think that saiga horns can grow back if they are cut off?

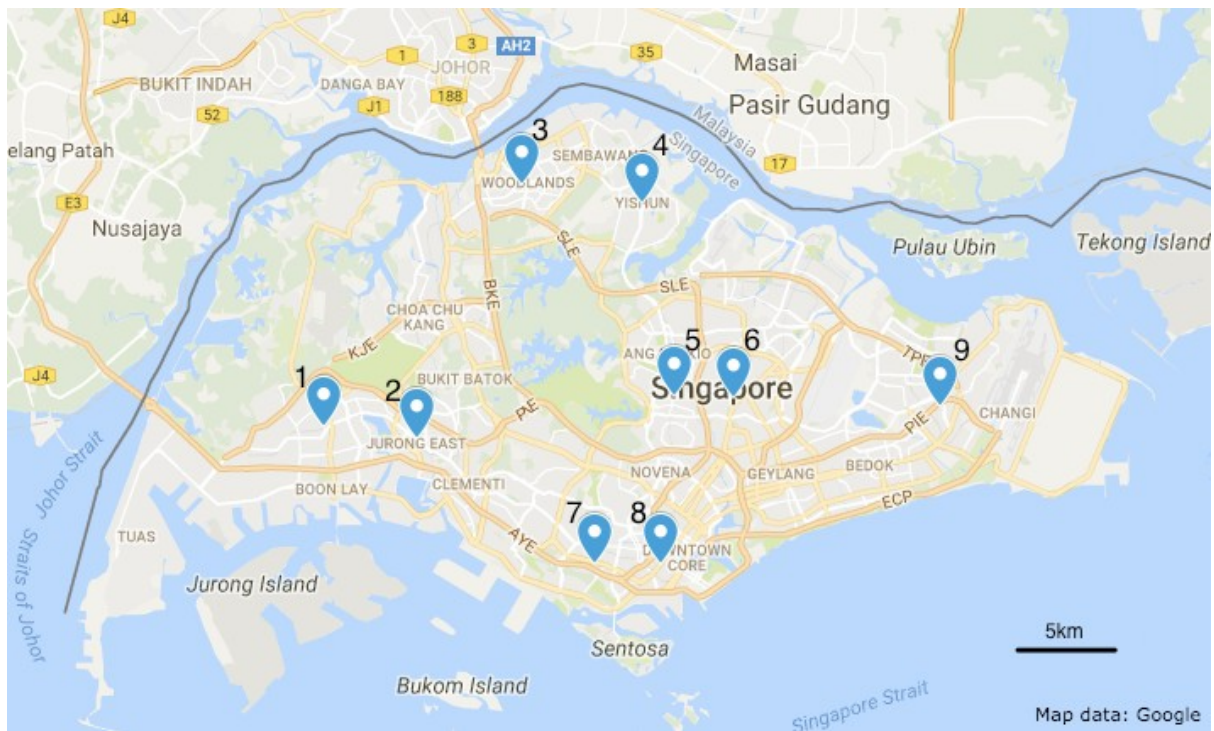
Choose only one.

- Yes
- No
- Not sure

C7. What is your personal monthly income?

- <SGD500
- SGD500-1,000
- SGD1,001-2,000
- SGD2,001-3,000
- SGD3,001-5,000
- >SGD5,000

You have reached the end of the survey. Thank you.



Supplementary FIG. 1 Locations of nine public-housing dominated neighbourhoods in Singapore where questionnaire surveys were conducted to investigate saiga horn consumption among Chinese Singaporeans. 1, Jurong West; 2, Jurong East; 3, Woodlands; 4, Yishun; 5, Bishan; 6, Serangoon; 7, Bukit Merah; 8, Chinatown; 9, Tampines.