# Letter to Editor

#### Retrospective user survey of JUNSAIKOMACHI for improving human health and skin conditions

Akiko Takashima<sup>1,2</sup>, Munetaka Sano<sup>2</sup>, Masahiro Sasaki<sup>3</sup>, Yui Umekawa<sup>1</sup>, Akira Sasaki<sup>1</sup>, Keishi Hata<sup>1,\*</sup>

<sup>1</sup>Akita Research Institute of Food & Brewing, 4-26 Sanuki, Araya-machi, Akita 010-1623, Japan, <sup>2</sup>Sano Inc., 3-4-2 Oroshi-machi, Akita, 010-0061, Japan, <sup>3</sup>Research Institute for Brain and Blood Vessels-Akita, 6-10 Sensyukubota-cho, Akita 010-0874, Japan

Received March 12, 2019; Accepted March 28, 2019

Dear editor,

We previously reported the improved effects of JUNSAIKOMACHI, a stick jelly-type dietary supplement with water shield extract and dried sake cake on bowel movement and skin conditions of healthy adult females using placebo-controlled double-blind 1-3) and open-label trials Clarification of why users purchase JUNSAIKOMACHI and whether they have felt the beneficial effects demonstrated in our previous studies is important and useful for product promotion. In this study, we distributed a questionnaire to JUNSAIKOMACHI subscribers regarding their subjective evaluation of health and skin conditions.

The consumer survey of effects on health and skin conditions was approved by the ethics committee of Akita Research Institute of Food and Brewing (Approval No. H30-01). The questionnaires on 29 symptoms of health and skin conditions were distributed to users of JUNSAIKOMACHI who have subscribed to the dietary supplement for over 4 months via online shopping sites or at physical stores. The users' subjective reports of JUNSAIKOMACHI were assessed by visual analogue scores (VAS), as in our previous open-label study 3), and the VAS sheets were mailed back anonymously. The statistical analysis of VAS for each symptom before/after administration was performed using the Wilcoxon signed rank test (GraphPad Prizm5, GraphPad Software Inc.). A value of p<0.05 was considered significant

Ten females in their 30s (1 user), 40s (6 users), 50s (2 users) and 60s (1 user), and one male in his 30s replied to this survey, and the results are summarized in Table 1. The continuous intake of JUNSAIKOMACHI markedly improved "bowel movement", but it did not affect other health conditions. The four skin conditions "dry skin", "skin texture", "elasticity and/or gloss of skin" and "noticeable pores" markedly improved between before/after administration, and subscribers felt positive effects in "dull skin" (p=0.063) and "makeup application" (p=0.058).

In the retrospective user survey, improved effects of JUNSAIKOMACH on health/skin conditions, such as "bowel movement", "dry skin" and "noticeable pores", were consistent with the results of our previous double-blind and open-label trials <sup>2,3</sup>). Furthermore, users may subscribe to JUNSAIKOMACHI to care for their skin conditions rather than health conditions.

#### Acknowledgement

We appreciate to Sano Pharmacy Inc. for their cooperation with the survey.

<sup>\*</sup>Corresponding author

hata@arif.pref.akita.jp

|                                 | VAS (mm)               |                   |         |
|---------------------------------|------------------------|-------------------|---------|
|                                 | Before<br>subscription | Current<br>status | p-value |
|                                 |                        |                   |         |
| Health condition                | -                      |                   |         |
| Stiff neck                      | 33.5±7.2               | 33.5±7.2          | ns      |
| Tired eyes                      | 38.2±4.7               | 38.3±4.7          | ns      |
| Appetite                        | 47.9±4.7               | 52.9±5.0          | ns      |
| Falling asleep                  | $64.2 \pm 7.8$         | 66.9±6.2          | ns      |
| Malaise                         | 53.1±6.4               | 55.5±6.2          | ns      |
| Waist circumference             | 39.5±5.4               | 45.9±6.9          | ns      |
| Foot swelling                   | 33.5±7.2               | 33.5±7.2          | ns      |
| Bowel movement                  | 49.2±7.6               | 77.9±5.2          | 0.002   |
| Dry eye                         | 52.3±7.4               | 55.6±7.3          | ns      |
| Sensitivity to cold             | 47.1±7.4               | 51.2±7.2          | ns      |
| Up/down a staircase             | 57.0±5.5               | 58.3±5.2          | ns      |
| Thirst                          | 58.0±5.1               | 58.7±4.8          | ns      |
| Blurred vision                  | 39.7±6.7               | $40.2 \pm 6.5$    | ns      |
| Flabby upper arm                | 39.5±3.6               | 42.0±3.9          | ns      |
| Skin condition                  |                        |                   |         |
| Dull skin                       | 41.2±2.7               | 51.1±5.8          | ns      |
| Dry skin                        | 33.2±5.0               | 49.3±5.6          | 0.023   |
| Skin texture                    | 40.3±3.4               | $49.2 \pm 6.0$    | 0.032   |
| Elasticity and/or gloss of skin | $40.6{\pm}2.7$         | $50.8 \pm 5.6$    | 0.036   |
| Rough skin                      | 39.0±4.9               | 50.7±5.5          | ns      |
| Desiccated and gritty skin      | 47.0±6.8               | 55.6±6.4          | ns      |
| Oily face                       | 52.5±5.2               | 54.4±5.2          | ns      |
| Frequent pimples                | 54.5±4.2               | 55.5±6.2          | ns      |
| Spots and freckles              | 45.8±6.7               | 48.7±7.2          | ns      |
| Noticeable pores                | 32.3±6.0               | 47.0±6.5          | 0.008   |
| Makeup application              | 45.1±3.8               | 54.5±3.6          | ns      |
| Corners of mouth sagging        | 42.7±4.0               | 43.5±4.1          | ns      |
| Fine lines around eyes          | 42.5±5.1               | 43.9±5.8          | ns      |
| Cheeks sagging                  | $44.5 \pm 3.0$         | 47.0±2.4          | ns      |
| Make-up runs easily             | 50.7±4.1               | 53.4±4.4          | ns      |

## Table 1 Effects of JUNSAIKOMACHI on Health and Skin Conditions

The data represents means  $\pm$  SEM (n=11). Ns, not significant vs before subscription.

## References

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Communicated by Kiyoshi Yasukawa