codex alimentarius commission

FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION

Agenda Item 5

JOINT FAO/WHO FOOD STANDARD PROGRAMME

FAO/WHO COORDINATING COMMITTEE FOR ASIA

Thirteenth Session, Kuala Lumpur, Malaysia 17-20 September 2002

PROPOSED DRAFT STANDARD FOR INSTANT NOODLES

- SUPPLEMENTARY COMMENTS FROM JAPAN -

Japan would like to provide further information with respect to our comments for "PROPOSED DRAFT STANDARD FOR INSTANT NOODLES" (CX/ASIA 02/5 Add.1) as follows;

1. Peroxide Value

    · We usually use "Acid Value (AV)" and "Peroxide Value (POV)" as the indicator which shows the degree of rancidity of fats in foods.

    · Measuring of AV and POV indicate their own different aspect of fats' behavior, therefore AV cannot alternate POV.

    · AV holds the amount of free fatty acid caused by hydrolysis of fats and shows the aging of fats, frequency of use etc..

    POV holds the amount of peroxide caused by absorption of atmospheric oxygen in fats and shows the producing amount of peroxide as a toxic substance.

    · We cannot have sufficient quality control for the rancidity of fats without using both indicators.

    · We submit and distribute "Studies on Rancidity of Fats in Foods" regarding relationship between the Degree of Rancidity and the Toxicity of Fats in Pre-cooked Instant Noodles as CRD, please refer it to the discussion of the necessity of POV mentioned above.

2. Sample Preparation of Methods of Analysis

2.1 Moisture

    · Pulverize approximately 50g of the sample, and pass it through 2380µm and 1680µm (equivalent to 8 and 10 mesh). Thoroughly mix that which remains on the 1680µm.

2.2 Extraction of Oil from Sample

· Take the necessary quantity of noodle (required for extracting approximately 3g of oil; approximately 50g through slightly different depending on the fat content), pulverize it, transfer the powder thus obtained into a Erlenmeyer flask with ground stopper, and add petroleum ether in such a way as to soak the powdered noodles. Allow into stand for about 2 hours while shaking the flask occasionally. Subsequently, filter the noodle sample solids from overflowing. Add approximately half of the previous amount of petroleum ether to the sample in the flask, and shake, and then filter it through the same filter paper.

· Transfer this filtrate into a separating funnel, add water to approximately 1/2-1/3 of volume of the filtrate, thoroughly shake to wash the mixture and discard the aqueous layer. After repeating this washing step twice more, separate the ether layer. Dehydrate the ether layer with anhydrous sodium sulfate, and then completely remove ether placing on a water bath maintained at 40? or less using a rotary evaporator so as to obtain a residue which is extracted fat.