

L-10 Relationship between skin surface hydration and subjective skin condition and menstrual cycle phase

Kazunori SHIMAGAMI¹⁾, Hisako TAKEUCHI¹⁾ and Shinobu MIURA²⁾ 1) Beauty Culture Laboratory, Kanebo, LTD. 2) Kanebo Foods, LTD. The subjects were 27 healthy women from twenties to forties. This investigation was executed for 70 days. Each subject measured the basal body temperature, a horny moisture content of the cheek and the arm, a room temperature and relative humidity, and checked the subjective skin conditions by five stages oneself every day. Each mean value in the three menstrual cycle phases was compared. The change in the horny moisture content concerning to the menstrual cycle was recognized in the subjects of about 30%. The decreasing tendency of the horny moisture content was admitted in the luteal phase at the cheek and in the menstrual phase at the forearm. The subjects who felt that some skin conditions of the face changed according to the menstrual cycle were minority. The symptoms which worsened at the menstrual period were dullness, dark circles, complexion, dryness and acne, and which worsened at the luteal phase were acne and skin color brightness. As for putting the skin, the rising tendency was felt in the follicular phase.

L-11 Effect of Task of Short-term Memory on Elderly People's Brain Wave

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The effect of short-term memory task on brain waves (EEG) has been studied. Three healthy subjects, 58.7 year-old on average, and a 60 year-old subject Y.M. with a cerebral embolism in his right frontal and temporal lobes were examined. The subjects were each asked to memorize 6 cards of different colors and patterns for 20 sec., and after 60 sec. of retention, to recognize the 6 cards from among 36. The EEG of the subject at 6 points was detected. β/α (%) was analyzed during the scheduling of the task, the rest before the task, the memorizing, retention and recognition respectively. The correct answer (%) of recognized cards on Y.M. was not found difference relative to that of the healthy subjects in spite of the significant difference of the β/α (%) caused by cerebral embolism.

L-12 Change of Skin Properties with Aging

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The skin properties were observed from view points of aging effect and sex difference. The subjects were divided into 3 groups, namely, YG (20's, ♂ 21, ♀ 21), MG (40's, ♂ 16, ♀ 20), SG (60's, ♂ 14, ♀ 16). The measurement points were 12 (3:exposed areas, 9:non-exposed areas) in the whole body, and measurement items were 9. The climatic chamber was controlled at 25 °C 60%RH (in YG, MG) and 28 °C 60%RH (in SG). In all items the aging effects were seen, especially skin color, pliability and subcutaneous fat showed the significant changes. Hue shifted by +1.8 for male and +2.6 for female in YR area. Chroma shifted by -1.1 for male and -1.3 for female. The pliability of SG increased 59% (♂) and 216% (♀) than YG or MG. The subcutaneous fat thickness showed the most notable sex difference in MG.

L-13 Age-Related-Pattern of Body Composition for Japanese 288 Men and 552 Women

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Body composition was measured for Japanese288men and 552 women,age range of 18-60yrs.Body density was assessed by densitometry and percent body fat(%Fat),fat mass and fat free mass were calculated according to Brozek. BMI and skinfold thicknesses were also obtained.Following results were obtained. 1) Means of body weight, BMI, skinfolds increased according to aging. 2) %Fat showed 14.7% at 18-20yr., 18.7% at 37.5-40 yr., and 24.3% at 50-55yr. in men. and 22.4% at 18-20yr., 24.4% at 37.5-40 yr., and 33.4% at 50-55yr in women. 3) Fat mass increased from 25yr in men and from 35yr in women 4) FFM gradually decreased with age increment, remarkably from 50 to 55 in men and women.

L-14 The effects of the Two Different Kinds of Pajamas Materials on Thermoregulatory Responses during Nocturnal Sleep

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The study aimed at knowing the effects of the two different kinds of Pajamas materials (blend of 80% cotton and 20% linen referred to C/L, 100% cotton referred to C) on thermoregulatory responses during nocturnal sleep. The experiments were performed at 30°C and 60%RH with 8 female years adults as participants. The results were summarized as follows: 1) Rectal temperature was significantly kept lower in C. 2) Delta leg skin temperature was significantly greater in C/L during first 3 hours after retirement. 3) The clothing microclimate temperature measured between frontal trunk and pajamas tended to be higher in C/L. 4) Subjective rating to the two different kinds of pajamas materials did not differ. The results were discussed in terms of thermal physiology and clothing sciences.

L-15 Effects of Skin Pressure Exerted by a Body Compensatory Brassiere on the Amount of Feces

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The present experiment aimed at knowing the effects of skin pressure produced by a body compensatory brassiere on defecation activity. Seven healthy women, aged 11-41 yrs, served as participants, being free of medication and constipation. The experiment lasted 3 weeks. The participants did not wear the body compensatory brassiere for the first week, wore it during waking hours for the second week, and again did not wear it for the third week. Whenever they desired to defecate, they did so and then measured the amount of feces. Eating times, daily amounts of food and drink, their menu, work intensity and its duration, retiring and rising times were controlled to be as similar as possible from day to day. The main finding was that the amount of feces was significantly smaller during the second week than the first and third week. We discussed these facts in terms of the suppression of the parasympathetic nervous system and intestine motility, and the delayed transit time in the large intestine.