

43rd Annual Meeting of the Japanese Association for the Study of Taste and Smell, Asahikawa, Japan, September 2–4, 2009

The full content of these abstracts is available online at www.chemse.oxfordjournals.org.

Effects of dietary zinc on taste sensitivity and salt preference in rats

Tomoko Goto, Hitoshi Shirakawa, and Michio Komai

Cell differentiation of taste bud and neuronal network formation

Yuji Seta, Masafumi Oda, Takashi Toyono, Shinji Kataoka and Kuniaki Toyoshima

Voltage-gated sodium channels expressed on fungiform taste bud cells in mice

Yoshitaka Ohtubo

The odorant-pattern for individual recognition is acquired during the early developmental stages

Takefumi Kikusui, Kayo Nakamura and Yuji Mori

Mechanisms of imprinting and homing in salmon: animal behavioral, reproductive endocrinological and sensory physiological research approaches

Hiroshi Ueda

Promoter analysis of mouse sweet and umami receptor, T1R3 gene

Takashi Toyono, Yuji Seta, Shinji Kataoka, Masafumi Oda and Kuniaki Toyoshima

Binding site for gymnemic acid at the sweet receptor hT1R2/hT1R3

Keisuke Sanematsu, Noriatsu Shigemura, Masafumi Jyotaki, Seiji Nakamura, Toshiaki Imoto and Yuzo Ninomiya

Fibroblast growth factor (Fgf) and its receptor (Fgfr) expression in mouse taste buds analyzed by RT-PCR

Eriko Matsumura, Hirohito Miura, Ayumi Nakayama, Hiroshi Tomonari, Makoto Ooki and Shuetsu Harada

Regulatory role of Six1 in the development of taste papillae

Yuko Suzuki, Keiko Ikeda and Kiyoshi Kawakami

Effect of continuous dietary sodium restriction on salt perception and properties of taste cells

Katsura Ueda, Michiko Nakatsuka, Shunnji Kumabe, Akiyo Kawano, Yoshiro Ishimaru, Satoshi Wakisaka and Yasutomo Iwai

Morphological characteristics of cells involved in glutamate signaling in the stomach

Junko Iijima, Sawa Horie, Hideaki Yasui and Shigeru Takami

Coexpression pattern of T1R3 and gastrointestinal hormones in duodenum

Masafumi Oda, Yuji Seta, Takashi Toyono, Shinji Kataoka and Kuniaki Toyoshima

Molecular and functional analysis of gustatory sugar receptor genes in *Drosophila simulans*

Shinjiro Saeki, Kenji Shinozaki, Hiromi Morita and Kunio Isono

Expression patterns of T1r/T2r, gustducin and their functions on gustatory neural responses in the soft palate of mice

Hiroshi Tomonari, Hirohito Miura, Ayumi Nakayama, Eriko Matsumura, Makoto Ooki, Yoichiro Shindo, Yoko Kusakabe, Robert F. Margolskee, Yuzo Ninomiya and Shuetsu Harada

Taste responses of mouse fungiform taste cells to multiple taste compounds that elicit similar taste sensation

Ryuuke Yoshida, Toshiaki Yasuo, Aya Miyauchi, Yuchio Yanagawa, Kunihiko Obata, Hiroshi Ueno, Robert F. Margolskee and Yuzo Ninomiya

GABA functions as neurotransmitter in the mice taste buds

Toshiaki Yasuo, Ryuuke Yoshida, Nao Horio, Noriatsu Shigemura and Yuzo Ninomiya

Enhancement of the chorda tympani nerve responses to mixtures of sweet and salt compounds in mice

Tadahiro Ohkuri, Keiko Yasumatsu, Yoko Kusuvara, Robert F. Margolskee and Yuzo Ninomiya

Neuronal response latency in the rostral nucleus of the solitary tract, the parabrachial nucleus and the gustatory cortex in the rat: Roles of GABAergic inhibition

Tatsuko Yokota and Katsunari Hiraba

The neural mechanisms of aversive taste reactivity by stimulation of GABA_A receptors in the ventral pallidum in rats

Tadashi Inui and Tsuyoshi Shimura

Role of the medial prefrontal cortex in extinction of conditioned taste aversion in mice

Yasunobu Yasoshima and Tsuyoshi Shimura

Overconsumption of a sucrose solution and brain reward system in mice

Megumi Tanibuchi, Yasunobu Yasoshima and Tsuyoshi Shimura

Pupil response of elderly for taste stimulation

Masataka Yoshioka, Yoshiaki Ono, Eiji Tanaka, Naoto Uesugi and Komasa Yutaka

The visualization of the efferent neuronal projection in the nucleus accumbens on the retrieval of conditioned taste aversion memory using manganese-enhanced MRI

Chizuko Inui-Yamamoto, Tadashi Inui, Yoshichika Yoshioka, Tsuyoshi Shimura and Izumi Ohzawa

The effect of umami taste on saliva secretion. -Concentrion dependency and synergistic effect of umami compounds
Yuki Sekine-Hayakawa, Misako Kawai, Kunio Torii and Hisayuki Uneyama

ATP, via the activation of P2X and P2Y receptors, affected on vagal celiac afferent nerves in the rat
Akihiko Kitamura, Akira Niijima, Kunio Torii and Hisayuki Uneyama

Relationship between concentration of human salivary Histatin and taste sensitivity to Quinine sulfate
Hiroyasu Wada, Itsuko Toyama, Yukio Hayata, Nobuko Shimazaki and Tetsuo Yamamori

Effects of inactivation of the central and basolateral nucleus of the amygdala on the voluntary intake of palatable liquid food
Yuhei Shinohara, Yasunobu Yasoshima, Tadashi Inui and Tsuyoshi Shimura

Taste discrimination among the mixed taste solutions
Tsuyoshi Horio

Comparison of the effects of taste and oral somatic sensation on the activation of the central histaminergic system
Tomoko Ishizuka, Noritaka Sako, Tomotaka Murotani, Mitsuko Shinohara, Atsushi Yamatodani and Kiyoshi Ohura

The effect of dietary free glutamate on dessert intake
Toshifumi Imada, Miki Tomoe, Nari Miyamoto, Eiichiro Kimura, Yoshiki Goda, Hisayuki Uneyama and Kunio Torii

Packages of chocolate affect taste perceptions and palatability of chocolate
Nobuyuki Sakai and Yuki Yamasaki

Simple evaluation of powdery instant soup by measurement of buffer capacity
Eriko Sato, Masahiko Atobe, Yukihisa Kato, Nobuyuki Takahashi and Yoshimasa Yamano

Association of the expression of taste receptors to dietary intakes
Yuka Okada, Mieko Aoki, Kaori Kobayashi, Shouko Sekiguchi, Kei Yamamoto, Fumihiro Koike, Kyoichi Takao, Hitomi Kumagai and Tetsuya Takao

Analysis of a food intake factor contributing to expression of hTAS2Rs
Tetsuya Takao, Yuka Okada, Mieko Aoki, Midori Kumagai, Kaori Kobayashi, Shouko Sekiguchi, Kei Yamamoto, Fumihiro Koike and Kyoichi Takao

Effect of bittern ingredients on the taste nerve responses to sodium chloride
Emi Okado, Tomoko Goto, Hitoshi Shirakawa and Michio Komai

Behavioral estimation of salty enhancing effects of glycine ethyl ester
Takayuki Kawai, Atsuko Matsumoto and Yuko Kusakabe

Taste alteration effect of spice extracts: Evaluation of the relationship between *in vitro* GAD activity test and salt taste sensation test on human subjects
Kumiko Hisaki, Yumi Nakamura, Sayaka Ueno and Hiroshi Ueno

Effect of miracle fruit on the five basic taste and electrical gustatory threshold
Michiko Kobayashi, Ryoko Kasahara, Chihiro Takeuchi, Eriko Morita and Chiaki Watanabe

Concentration of Val, Met and IMP in gonads of seven edible species of sea urchin in Japan
Yuko Murata and Tatsuya Unuma

Objective evaluation of the 'mildness' in the soy sauce made of whole soybeans
Miho Imamura, Tsuneo Sato and Osamu Hatamoto

The taste characteristics of carp sashimi from two producing districts
Kana Kogiso, Yumi Yoshioka, Kimio Kondo and Hiroko Nakazawa

The influence of flavor on the sweet and sour tastes
Hideko Kawaki

The influence of prolonged aerobic exercise on bitter taste sensitivity
Masataka Narukawa, Hidetoshi Ue, Masahide Uemura and Yukako Hayashi

Examination of influence that monosodium glutamate intake gives to feeding desire afterwards - a fMRI study-
Hiroyuki Sakuma, Toshifumi Imada, Tomokazu Tsurugizawa, Yoshiki Goda, Tominori Uno, Li-qun Wang and Mitsuo Toneike

Diagnosis of taste dysfunction using zinc-binding protein in saliva (gustin)

Nobuko Shimazaki, Hiroshi Tomita, Tetsuo Yamamori and Kanji Ishibashi

Involvement of masticatory stimuli in the induction of rat salivary cystatins in response to dietary quinine or tannic acid

Hideo Katsukawa, Sanae Kawamura, Masako Fujimoto, Keiko Yasumatsu, Kiyohito Nakashima, Yuzo Ninomiya and Noritaka Sako

Creation of flavor database including the calculated molecular features

Fumiko Yoshii

Procedures for observation of the pheromone receptive region by scanning electron microscopy

Sawa Horie, Saki Shindo and Shigeru Takami

Histological properties of the nasal cavity and the olfactory bulb in brown-eared bulbul *Hypsipetes amaurotis*

Makoto Yosokawa, Toru Saito, Masato Aoyama, Shoei Sugita and Masumi Ichikawa

Synaptic configuration of mitral/tufted cells in accessory olfactory bulb by three-dimensional ultrastructural reconstruction

Kentaro Endoh, Keiko Moriya-Ito, Yoko Tsukamoto and Masumi Ichikawa

Pharmacological effects of cocaine hydrochloride on voltage-gated sodium currents in the olfactory receptor cells

Kengo Tamari, Hiroko Takeuchi, Masayoshi Kobayashi, Takashi Kurahashi and Tetsuro Yamamoto

Distribution of Fos-immunoreactive cells in the olfactory bulb of urethane-anesthetized rats

Shinji Matsutani

A mechanism of action of group II metabotropic glutamate receptors suppressing dendrodendritic inhibition in the mouse accessory olfactory bulb

Mutsuo Taniguchi and Hideto Kaba

Olfactory responses of descending interneurons and thoracic motors in the male cockroach

Jun Inouchi

Reconstruction of functional expression of a vomeronasal receptor by using adenovirus vectors

Toshiharu Namba, Kazuyo Muramoto, Keiko Moriya-Ito, Masumi Ichikawa and Hideto Kaba

Effects of major urinary proteins (MUP) on the proliferation and/or survival of mouse vomeronasal stem cells

Kazuyo Muramoto, Rong-Dan Quan, Keiichi Tonosaki and Hideto Kaba

Primer effects in a sex pheromone of masu salmon (*Oncorhynchus masou*)

Tetsuo Mihara, Ryuhei Ogura and Hidenobu Yambe

An estimation of putative magneto-receptors using classical proboscis extension reflex to a flower odor in honeybees

Natsuko Fujita and Tsuneo Hatanaka

Shochu waste stillage as a bait in pot fishing for catching the octopus, *Octopus vulgaris*

Keigo Ebata, Kazuhiko Anraku, Kazuaki Yokota and Yuichi Kukiyama

Proposed method to measure and analyze olfactory response, with the aim of establishing an objective diagnostic method for central olfactory impairment

Tomonori Uno, Li-qun Wang, Fumikazu Miwakeichi, Mitsuo Tonoike and Teruo Kaneda

The effect of fragrance of fabric softener on touch of towel

Tomoko Kohno, Kouichi Suzuki, Miki Ohwaku, Nobuhiro Ohyama and Nobuyuki Sakai

Influence of subjectively-chosen odors on task performance

Shiori Nakano, Miyoko Aritomi and Saho Ayabe-Kanamura

The impact of sub-threshold odorants on the odor intensity

Toshio Miyazawa, Shuichi Muranishi, Takashi Hamaguchi and Paul M. Wise

Effect of odors of grapefruit-oil and lavender-oil on physiological and psychological functions

Chiemi Asano, Teruko Ito and Naoko Kawano

Sensory structure on sweet cream Koku

Noriaki Kobayashi, Shoko Hachisuka and Osamu Nishimura

Impact of terpene alcohol metabolism to beer flavor –flavor characteristics of Citra hop-

Kiyoshi Takoi, Koichiro Koie, Yutaka Itoga, Yuuta Katayama, Masayuki Shimase, Takayuki Kosugi, Yasuyuki Nakayama and Junji Watari

Influence of oil addition on fishy aftertaste perception in wine with seafood pairing

Takayuki Tamura, Kiyoshi Taniguchi, Yumiko Suzuki, Toshiyuki Okubo, Ryoji Takata and Tomonori Konno

The examination of the effective olfactory stimulation for near-infrared spectroscopy as objective olfactory testing

Eiji Kobayashi, Masayuki Karaki, Ryuichi Kobayashi and Nozomu Mori

Olfactory screening test on school children

Tadashi Ishimaru

Clinical analysis in patients with unknown origins of olfactory dysfunction

Kohei Nishida, Masayoshi Kobayashi, Hitomi Ogihara, Takeo Tetsu, Masako Kitano and Kazuhiko Takeuchi

Effect of odor on neocortical responses to taste in fronto-temporal regions of the neocortex -Flavor creation using optical imaging-

Ayano Fujiki, Kana Saito, Tomona Matsumoto, Akio Nakamura, Junichi Ide, Masashi Ishikawa and Kensaku Mori

Added flavorings enhance neocortical taste responses in the fronto-temporal regions -Flavor creation using optical imaging-

Tomona Matsumoto, Akio Nakamura, Ayano Fujiki, Kana Saito, Junichi Ide, Masashi Ishikawa and Kensaku Mori

Odor liking and food preference evoked from fruit flavors

Kaori Takahashi and Satomi Kunieda

Relationships between odor and free radical scavenging activity

Yuuichiro Yamanishi, Yoriko Kotani, Hiroko Kubo and Keiichi Tonosaki