

Accepted Manuscript

Research report

C-Fos Expression in the Parabrachial Nucleus Following Intraoral Bitter Stimulation in the Rat with Dietary-induced Zinc Deficiency

Akiyo Kawano, Shiho Honma, Chizuko Inui-Yamamoto, Akira Ito, Hitoshi Niwa, Satoshi Wakisaka

PII: S0006-8993(17)30023-9

DOI: <http://dx.doi.org/10.1016/j.brainres.2017.01.020>

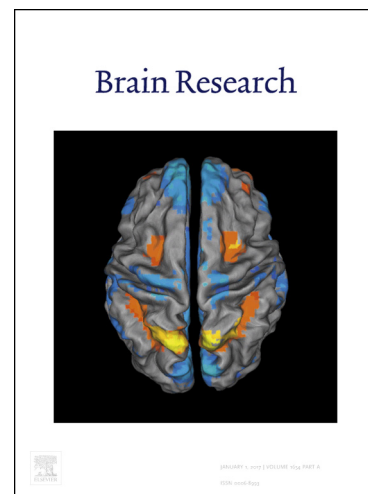
Reference: BRES 45256

To appear in: *Brain Research*

Received Date: 4 August 2016

Revised Date: 14 January 2017

Accepted Date: 16 January 2017



Please cite this article as: A. Kawano, S. Honma, C. Inui-Yamamoto, A. Ito, H. Niwa, S. Wakisaka, C-Fos Expression in the Parabrachial Nucleus Following Intraoral Bitter Stimulation in the Rat with Dietary-induced Zinc Deficiency, *Brain Research* (2017), doi: <http://dx.doi.org/10.1016/j.brainres.2017.01.020>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

To: Brain Research

C-Fos Expression in the Parabrachial Nucleus Following Intraoral Bitter Stimulation in the Rat with Dietary-induced Zinc Deficiency

Akiyo Kawano^{a, b*}, Shiho Honma^a, Chizuko Inui-Yamamoto^a, Akira Ito^a, Hitoshi Niwa^b,
Satoshi Wakisaka^a

^aDepartment of Oral Anatomy and Developmental Biology

Osaka University Graduate School of Dentistry

and

^bDepartment of Dental Anesthesiology

Osaka University Graduate School of Dentistry, Osaka, Japan

*Corresponding author:

Akiyo Kawano
Department of Dental Anesthesiology
Osaka University Graduate School of Dentistry
1-8 Yamadaoka
Suita, Osaka 565-0871, Japan.
Tel: +81-6-6879-2972; Fax: +81-6-6879-2975
E-mail: akawano@dent.osaka-u.ac.jp

Abstract

Zinc deficiency causes various symptoms including taste disorders. In the present study, changes in expression of c-Fos immunoreactivity in neurons of the parabrachial nucleus (PBN), one of the relay nuclei for transmission of gustatory information, after bitter stimulation to the dorsal surface of the tongue were examined in zinc-deficient rats.

Experimental zinc-deficient animals were created by feeding a low-zinc diet for 4 weeks, and showed the following symptoms of zinc deficiency: low body weight, low serum zinc content

Download English Version:

<https://daneshyari.com/en/article/5736835>

Download Persian Version:

<https://daneshyari.com/article/5736835>

[Daneshyari.com](https://daneshyari.com)