

## **Kodo millet whole grain and bran supplementation prevents high-fat diet induced derangements in lipid profile, inflammatory status and gut bacteria in mice**

**Siddhartha M Sarma<sup>a,e</sup> #, Pragyanshu Khare<sup>a</sup> #, Sneha Jagtap<sup>b</sup>, Dharendra P Singh<sup>a</sup>, Ritesh K Baboota<sup>a</sup>, Koteswariah Podili<sup>c</sup>, Ravneet K Boparai<sup>d</sup>, Jaspreet Kaur<sup>e\*</sup>, Kamlesh K Bhutani<sup>b</sup>, Mahendra Bishnoi<sup>a</sup>, Kanthi Kiran Kondepudi<sup>a\*</sup>**

<sup>a</sup> National Agri-Food Biotechnology Institute, SAS Nagar, Punjab, India

<sup>b</sup> National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar, Punjab, India

<sup>c</sup> Division of Biomedical Sciences, School of Biosciences and Technology, VIT University, Vellore, Tamil Nadu, India

<sup>d</sup> Department of Biotechnology, Government College for Girls, Sector 42, Chandigarh, India

<sup>e</sup> University Institute of Engineering and Technology, Panjab University, Chandigarh, India

**# These authors contributed equally and are the first authors.**

### **\* Corresponding Authors:**

**Kanthi Kiran Kondepudi, PhD**

Scientist - C,

National Agri-Food Biotechnology Institute (NABI),

C-127, Industrial Area, Phase VIII, SAS Nagar, Punjab – 160 071, India

Email: [kiran@nabi.res.in](mailto:kiran@nabi.res.in)

Phone: +91-172-2290128

Fax: +91-172-+91-172-4604888

**Jaspreet Kaur, PhD**

Associate Professor,

University Institute of Engineering and Technology (UIET),

Panjab University, Sector 19, Chandigarh, India

Email: [jaspreet\\_virdi@yahoo.com](mailto:jaspreet_virdi@yahoo.com)

## Electronic supplementary information 2: List of qRT-PCR primers

Primer	Forward sequence	Reverse sequence
<i>β actin</i>	TGTTACCAACTGGGACGACA	GGGGTGTGAAGGTCTCAA
<i>GAPDH</i>	AAGGGCTCATGACCACAGTC	CACATTGGGGGTAGGAACAC
<i>ACC</i>	CAGAACATGTGGGTGTCCAG	GGGCGTTCTTTGAAATACCA
<i>NFκB</i>	GAGGTCTCTGGGGTACCAT	TTGCGGAAGGATGTCTCCAC
<i>F4/80</i>	TCTGGGGAGCTTACGATGGA	GAATCCCGCAATGATGGCAC
<i>MCP1</i>	TGGCTGTGTTTGCCTCTCTA	CCTACAGGAAACAGGGTGT
<i>HSL</i>	GAGGCCTTTGAGATGCCACT	GCCAGGCTGTTGAGTACCTT
<i>PPARγ</i>	GCCAAGGTGCTCCAGAAGAT	CTTTGTCAGCGACTGGGACT
<i>C/EBP α</i>	CCAGTGACAATGACCGCCT	CGACCCATAACCATCCTCCG
<i>Total Bacteria</i>	ACTCCTACGGGAGGCAGCAGT	ATTACCGCGGCTGCTGGC
<i>Akkermansia</i>	CAG CAC GTG AAG GTG GGG AC	CCT TGC GGT TGG CTT CAGAT
<i>Bacteroidetes</i>	ACGCTAGCTACAGGCTTAACA	ACGCTACTTGGCTGGTTCA
<i>Firmicutes</i>	GCGTGAGTGAAGAAGT	CTACGCTCCCTTTACAC
<i>Roseburia spp.</i>	GCGGTRCGGCAAGTCTGA	CCTCCGACACTCTAGTMCGA
<i>Bifidobacteria</i>	TCGCGTCYGGTGTGAAAG	CCACATCCAGCRTCCAC
<i>Lactobacillus</i>	CACCGCTACACATGGAG	AGCAGTAGGGAATCTTCCA