

## ABSTRACT

**Dian Rizkina. B.1710279.** Provision of Complementary Foods for Breast Milk (MP-ASI) Based on Pumpkin Puree (*Cucurbita moschata*) on Growth and Immunomodulators. Essay. Under the guidance of Tiana Fitrilia and Mardiah.

Pumpkin (*Cucurbita moschata*) is a plant that contains vitamin A assumed to have an immunomodulatory effect. The research aimed to pumpkin puree determine the growth activity and immunomodulatory effects of Complementary foods based on pumkin puree in male rats strain *Sprague Dawley*. As an antigen, sheep red blood cells (SDMD) were given. Complete randomized design (RAL) was used in this experimental research and 20 male rats aged 6-8 weeks and wighed between 130-200 grams were used. The male rats were divided into 4 treatments and each group consist of 5 rats. Group A1 as a normal group (without treatment), group A2 (negative control), group A3 (positive control), and group A4 (treatment group) were given complementary foods based on pumkin puree dose of 8.19 g/ 130 g BB. The treatments was given by sonde for 21 days. On day 22, the rats were induced with 5% SDMD antigen intraperitoneally. The observations were conducted by measuring body weight, lymphoid organ weights, hematological values, differential leukocytes and total protein serum. The research data obtained were statistically processed using the ANOVA test. Complementary foods based on pumkin puree and fresh pumpkin has immunomodulatory activity based on an increase in the number of erythrocytes, platelets and serum protein, but does not increase the number of leukocytes, lymphocytes, monocytes and granulocytes.

**Keywords:** complementary food for breast milk, pumpkin (*Cucurbita moschata*), growth, immunomodulator.

## ABSTRAK

**Dian Rizkina. B.1710279.** Pemberian Makanan Pendamping Air Susu Ibu (MPASI) Berbasis Puree Labu Kuning (*Cucurbita moschata*) Terhadap Pertumbuhan dan Imunomodulator. Skripsi. Di bawah bimbingan Tiana Fitriilia dan Mardiah.

Labu kuning (*Cucurbita moschata*) merupakan salah satu tanaman yang mengandung vitamin A yang diduga dapat memberikan efek imunomodulator. Penelitian ini bertujuan mengkaji aktivitas pertumbuhan dan efek imunomodulator MP-ASI bubur saring berbasis puree labu kuning pada tikus jantan galur *Sprague Dawley*. Sebagai antigen diberikan sel darah merah domba (SDMD). Penelitian eksperimental dengan rancangan acak lengkap (RAL), menggunakan 20 ekor tikus jantan berumur 6-8 minggu dengan berat badan sekitar 130-200 gram. Tikus dibagi menjadi 4 perlakuan dan masing-masing kelompok terdiri dari 5 ekor. Kelompok A1 sebagai kelompok normal (tanpa perlakuan), kelompok A2 (kontrol negatif), kelompok A3 (kontrol positif), dan kelompok A4 (kelompok perlakuan) yang diberi MP-ASI bubur saring dengan dosis 8,19 g/130 g BB. Pemberian sediaan uji diberikan secara sonde selama 21 hari. Pada hari ke-22 hewan uji diinduksi dengan antigen SDMD 5% secara intraperitoneal. Pengamatan dilakukan dengan mengukur berat badan, bobot organ limfoid, nilai hematologi, diferensial leukosit dan total protein serum. Data penelitian yang diperoleh diolah secara statistik menggunakan uji ANOVA. MP-ASI bubur saring berbasis puree labu kuning dan labu kuning segar memiliki aktivitas imunomodulator berdasarkan peningkatan jumlah eritrosit, trombosit dan protein serum, namun tidak meningkatkan jumlah leukosit, limfosit, monosit dan granulosit.

**Kata kunci:** Makanan pendamping ASI, labu kuning (*Cucurbita moschata*), pertumbuhan, imunomodulator.