

ABSTRACT

Natasha Janice (00000010219)

STUDY OF HIGH FIBER DRY NOODLES MADE FROM ARROWROOT (*Maranta arundinacea* L.), BUTTERNUT SQUASH (*Cucurbita moschata* Duchesne), AND KONJAC FLOUR

Thesis, Faculty of Science and Technology (2018).

(xvi + 79 pages, 8 tables, 32 figures, 19 appendices)

Indonesian people still lack in dietary fiber consumption, which will interrupt the healthiness of the body. Arrowroot (*Maranta arundinacea* L.) and butternut squash (*Cucurbita moschata* Duchesne) are rich in dietary fiber. The use of both arrowroot flour and butternut flour with konjac as a replacer of gluten to develop dry noodles with high dietary fiber is the aim of this research. Dry noodles were made with different ratios of arrowroot and butternut flour (90:10, 80:20, 70:30) and different percentages of konjac flour (20%, 25%, 30%). Each formula was analyzed for organoleptic characteristics (color, aroma, taste, texture, overall acceptance), physical characteristics (cooking time, cooking loss, color, texture), and chemical characteristics (water absorption, moisture content). The best formula is 80:20 arrowroot and butternut flour ratio with 25% konjac. The result shows that konjac is able to replace the role of gluten, but in certain concentrations. The best formula contains 74.25% carbohydrate (including dietary fiber 21.74%), 7.18% protein, 0.925 fat, 12.28% ash content, and 5.37% moisture content.

Keywords: arrowroot, butternut squash, dietary fiber, dry noodles, konjac

Reference: 98 (1989-2017)

ABSTRAK

Natasha Janice (00000010219)

STUDI PEMBUATAN MI KERING TINGGI SERAT DARI TEPUNG UMBI GARUT (*Maranta arundinacea* L.), LABU MADU (*Cucurbita moschata* Duchesne), DAN KONJAK

Tugas Akhir, Fakultas Sains dan Teknologi (2018).

(xvi + 79 halaman, 8 tabel, 32 gambar, 19 lampiran)

Konsumsi serat pangan di Indonesia masih belum mencukupi, yang dapat mengganggu kesehatan tubuh. Umbi garut (*Maranta arundinacea* L.) dan labu madu (*Cucurbita moschata* Duchesne) merupakan tanaman yang kaya akan kandungan serat pangan. Pemanfaatan tepung umbi garut, tepung labu madu, dan konjak sebagai pengganti gluten dalam pembuatan mi kering tinggi serat adalah tujuan dari penelitian ini. Mi kering dibuat dengan rasio berbeda antara tepung umbi garut dan labu madu (90:10, 80:20, 70:30) serta konsentrasi konjak berbeda (20%, 25%, 30%). Setiap formula dianalisis sifat organoleptik (warna, aroma, rasa, tekstur, penerimaan keseluruhan), sifat fisik (waktu pemasakan, *cooking loss*, warna, tekstur) dan sifat kimia (daya serap air, kadar air). Formula terbaik diperoleh dari mi dengan rasio tepung umbi garut dan labu madu 80:20 dengan konsentrasi konjak 25%. Hal ini berarti konjak mampu berperan sebagai pengganti gluten, namun pada konsentrasi tertentu. Formula terbaik mengandung 74.25% karbohidrat (termasuk serat pangan sebesar 21.74%), 7.18% protein, 0.92% lemak, 12.28% kadar abu, dan 5.37% kadar air.

Kata Kunci: konjak, labu madu, mi kering, serat pangan, umbi garut

Referensi: 98 (1989-2017)