**LAMPIRAN**

*Lampiran 1*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **P1** | **Jumlah (g)** | **Energi (kkal)** | **Protein (g)** | **Lemak (g)** | **Karbohidrat (g)** | **Serat (g)** |
| tepung gandum | 80 | 271 | 11,0 | 1,5 | 58,1 | 9,8 |
| tepung ubi cilembu | 35 | 138 | 1,7 | 0,3 | 32,1 | 0,0 |
| kedelai hitam | 35 | 116 | 12,2 | 6,3 | 12,2 | 5,6 |
| Telur | 60 | 97 | 7,7 | 6,9 | 0,4 | 0,0 |
| Minyak kelapa sawit | 20 | 180 | 0,0 | 20,0 | 0,0 | 0,0 |
| Gula pasir | 0 | 0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Selai nanas | 35 | 53 | 0,0 | 0,0 | 19,3 | 0,0 |
| Kismis | 20 | 60 | 0,6 | 0,1 | 15,8 | 0,7 |
|  |  |  |  |  |  |  |
| **jumlah** | 285 | 855 | 32,5 | 35,1 | 122,0 | 15,4 |
| **%** | 100 | 300 | 11,4 | 12,3 | 42,8 | 5,4 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **P2** | **Jumlah (g)** | **Energi (kkal)** | **Protein (g)** | **Lemak (g)** | **Karbohidrat (g)** | **Serat (g)** |
| tepung gandum | 75 | 254 | 10,3 | 1,4 | 54,4 | 9,2 |
| tepung ubi cilembu | 25 | 99 | 1,2 | 0,2 | 23,0 | 0,0 |
| kedelai hitam | 50 | 166 | 17,5 | 9,1 | 17,4 | 8,0 |
| Telur | 60 | 97 | 7,7 | 6,9 | 0,4 | 0,0 |
| Minyak kelapa sawit | 20 | 180 | 0,0 | 20,0 | 0,0 | 0,0 |
| Gula pasir | 0 | 0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Selai nanas | 35 | 53 | 0,0 | 0,0 | 19,3 | 0,0 |
| Kismis | 20 | 60 | 0,6 | 0,1 | 15,8 | 0,7 |
|  |  |  |  |  |  |  |
| **jumlah** | 285 | 908 | 37,2 | 37,7 | 130,3 | 17,9 |
| **%** | 100 | 319 | 13,1 | 13,2 | 45,7 | 6,3 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **P3** | **Jumlah (g)** | **Energi (kkal)** | **Protein (g)** | **Lemak (g)** | **Karbohidrat (g)** | **Serat (g)** |
| tepung gandum | 75 | 254 | 10,3 | 1,4 | 54,4 | 9,2 |
| tepung ubi cilembu | 50 | 197 | 2,4 | 0,5 | 45,9 | 0,0 |
| kedelai hitam | 25 | 83 | 8,7 | 4,5 | 8,7 | 4,0 |
| Telur | 60 | 97 | 7,7 | 6,9 | 0,4 | 0,0 |
| Minyak kelapa sawit | 20 | 180 | 0,0 | 20,0 | 0,0 | 0,0 |
| Gula pasir | 0 | 0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Selai nanas | 35 | 53 | 0,0 | 0,0 | 19,3 | 0,0 |
| Kismis | 20 | 60 | 0,6 | 0,1 | 15,8 | 0,7 |
|  |  |  |  |  |  |  |
| **jumlah** | 285 | 924 | 29,7 | 33,4 | 144,5 | 13,9 |
| **%** | 100 | 324 | 10,4 | 11,7 | 50,7 | 4,9 |

*Lampiran 2*

FORM PENENTUAN TARAF PERLAKUAN TERBAIK

**Penentuan Perlakuan Terbaik**

Produk : *Snack Bar* Substitusi Tepung Ubi Jalar(*Ipomoea batatas)* Cilembu dan Kedelai Hitam untuk *Snack* Penderita Diabetes Mellitus

Responden :

Petunjuk :

Bapak/Ibu diminta untuk mengemukakan pendapat tentang urutan (rangking) pentingnya variabel berikut terhadap produk dengan mengurutkan 9 variabel dari tertinggi keterendah dengan mencantumkan angka 1-9. Angka terendah untuk variabel kurang penting dan angka tertinggi untuk yang terpenting. Pemberian nilai tidak boleh sama.

|  |  |
| --- | --- |
| Variabel | Rangking |
| Nilai Energi |  |
| Kadar KH |  |
| Kadar Protein |  |
| Kadar Lemak |  |
| Kadar Serat |  |
| Rasa |  |
| Aroma |  |
| Tekstur |  |
| Warna |  |

Atas partisipasi bapak/ibu diucapkan terimakasih

*Lampiran 3*

FORM PENILAIAN ORGANOLEPTIK

**FORM UJI SKALA KESUKAAN (HEDONIS SCALE TEST)**

Nama Panelis :

Tanggal :

Produk : *Snack Bar* Substitusi Tepung Ubi Jalar(*Ipomoea batatas)* Cilembu dan Kedelai Hitam untuk *Snack* Penderita Diabetes Mellitus

Dihadapan Saudara dibagikan sampel *snack bar*. Saudara diminta untuk memberikan penilaian terhadap tekstur, aroma, warna, dan rasa dengan menggunakan skala penilaian sebagai berikut :

4 = Sangat Suka

3 = Suka

2 = Tidak Suka

1 = Sangat Tidak Suka

Setelah Saudara mencicipi salah satu sampel, Saudara diminta berkumur dengan air putih yang telah disediakan sebelum mencicipi sampel yang lain. Selain itu Saudara juga diminta memberikan kritik dan saran.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Kode Sampel | Kriteria Penilaian | | | |
| Warna | Aroma | Tekstur | Rasa |
| 145 |  |  |  |  |
| 242 |  |  |  |  |
| 355 |  |  |  |  |

Kritik dan Saran :

….

Terima Kasih Atas Partisipasinya

*Lampiran 4*

**RINCIAN KEBUTUHAN ANGGARAN**

**Proposal**

1. Biaya rental dan print proposal Rp. 100.000

2. Biaya internet Rp. 50.000

3. Foto copy perbanyak proposal Rp. 50.000

4. Laboratorium (Uji Proksimat) Rp 200.000

+

Total Rp. 400.000

**Alat dan Bahan**

1. Tepung Ubi Cilembu 1,07 kg Rp. 60.000

2. Kedelai Hitam 500 gr Rp 50.00

3. Tepung Gandum 500 gr Rp. 35.000

4. Margarin 200 gr Rp. 5.750

5. Telur ayam 500 gr Rp. 9.500

6. Bahan lainnya Rp 65.000

+

Total Rp. 225. 500

*Lampiran 5*

|  |  |  |  |
| --- | --- | --- | --- |
| Panelis | WARNA | | |
|  | P1 | P2 | P3 |
| 1 | 3 | 2 | 2 |
| 2 | 2 | 2 | 2 |
| 3 | 2 | 2 | 2 |
| 4 | 2 | 1 | 3 |
| 5 | 3 | 2 | 1 |
| 6 | 3 | 3 | 3 |
| 7 | 2 | 2 | 1 |
| 8 | 3 | 2 | 2 |
| 9 | 4 | 2 | 3 |
| 10 | 3 | 3 | 2 |
| 11 | 3 | 2 | 2 |
| 12 | 3 | 3 | 3 |
| 13 | 3 | 3 | 2 |
| 14 | 2 | 2 | 2 |
| 15 | 4 | 2 | 3 |
| 16 | 3 | 3 | 3 |
| 17 | 2 | 3 | 3 |
| 18 | 3 | 3 | 3 |
| 19 | 3 | 3 | 2 |
| 20 | 3 | 3 | 3 |
| JUMLAH | 56 | 48 | 47 |
| RATA-RATA | 2,8 | 2,4 | 2,35 |
| MEDIAN | 3 | 2 | 2 |
| MODUS | 3 | 2 | 2 |

*Lampiran 6*

|  |  |  |  |
| --- | --- | --- | --- |
| PANELIS | AROMA | | |
|  | P1 | P2 | P3 |
|  | 2 | 3 | 3 |
|  | 4 | 2 | 3 |
|  | 3 | 4 | 3 |
|  | 3 | 2 | 4 |
|  | 1 | 2 | 3 |
|  | 3 | 3 | 2 |
|  | 2 | 2 | 2 |
|  | 3 | 3 | 3 |
|  | 2 | 4 | 3 |
|  | 3 | 2 | 3 |
|  | 3 | 2 | 3 |
|  | 3 | 4 | 4 |
|  | 3 | 2 | 2 |
|  | 3 | 4 | 2 |
|  | 3 | 3 | 3 |
|  | 3 | 3 | 3 |
|  | 3 | 3 | 3 |
|  | 4 | 3 | 3 |
|  | 2 | 3 | 3 |
|  | 3 | 3 | 4 |
| JUMLAH | 56 | 57 | 59 |
| RATA-RATA | 2,8 | 2,85 | 2,95 |
| MEDIAN | 3 | 3 | 3 |
| MODUS | 3 | 3 | 3 |

*Lampiran 7*

|  |  |  |  |
| --- | --- | --- | --- |
| PANELIS | TEKSTUR | | |
|  | P1 | P2 | P3 |
|  | 3 | 2 | 2 |
|  | 3 | 3 | 3 |
|  | 3 | 3 | 3 |
|  | 4 | 2 | 3 |
|  | 2 | 2 | 2 |
|  | 4 | 2 | 3 |
|  | 3 | 1 | 1 |
|  | 3 | 3 | 2 |
|  | 3 | 4 | 4 |
|  | 4 | 3 | 2 |
|  | 3 | 2 | 2 |
|  | 4 | 2 | 2 |
|  | 4 | 3 | 2 |
|  | 3 | 2 | 3 |
|  | 3 | 1 | 2 |
|  | 4 | 3 | 3 |
|  | 3 | 3 | 3 |
|  | 3 | 3 | 3 |
|  | 4 | 2 | 2 |
|  | 4 | 3 | 4 |
| JUMLAH | 67 | 49 | 51 |
| RATA-RATA | 3,35 | 2,45 | 2,55 |
| MEDIAN | 3 | 2,5 | 2,5 |
| MODUS | 3 | 3 | 2 |

*Lampiran 8*

|  |  |  |  |
| --- | --- | --- | --- |
| PANELIS | RASA | | |
|  | P1 | P2 | P3 |
|  | 3 | 2 | 2 |
|  | 3 | 2 | 2 |
|  | 4 | 3 | 2 |
|  | 4 | 2 | 3 |
|  | 2 | 2 | 3 |
|  | 4 | 3 | 3 |
|  | 3 | 2 | 2 |
|  | 4 | 1 | 2 |
|  | 4 | 3 | 3 |
|  | 4 | 2 | 3 |
|  | 3 | 2 | 2 |
|  | 3 | 2 | 2 |
|  | 4 | 2 | 2 |
|  | 4 | 2 | 4 |
|  | 3 | 1 | 2 |
|  | 4 | 2 | 2 |
|  | 3 | 1 | 2 |
|  | 3 | 2 | 2 |
|  | 4 | 2 | 2 |
|  | 3 | 4 | 4 |
| JUMLAH | 69 | 42 | 49 |
| RATA-RATA | 3,45 | 2,1 | 2,45 |
| MEDIAN | 3,5 | 2 | 2 |
| MODUS | 4 | 2 | 2 |

*Lampiran 9*

|  |  |  |  |
| --- | --- | --- | --- |
| **Kebutuhan Gizi DM (2100 Kkal)** | | | |
|  | **Askandar** | **Total Kebutuhan** | **Snack 10%** |
| **Energy (Kkal)** |  | 2100 | 210 |
| **Protein (g)** | 12% | 63 | 6,3 |
| **Lemak (g)** | 20% | 46,7 | 4,7 |
| **KH (g)** | 68% | 357 | 35,7 |
| **Serat (g)** |  | 25 | 2,5 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PERLAKUAN | JUMLAH (g) | E (kkal) | P (g) | L (g) | KH (g) | SERAT (g) |
| **P1** | 100 | 300 | 11,4 | 12,3 | 42,8 | 5,4 |
| **P2** | 100 | 319 | 13,1 | 13,2 | 45,7 | 6,3 |
| **P3** | 100 | 324 | 10,4 | 11,7 | 50,7 | 4,9 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PERLAKUAN | JUMLAH (g) | E (kkal) | P (g) | L (g) | KH (g) | SERAT (g) |
| P1 | 65 | 195 | 7,4 | 8,0 | 27,8 | 3,5 |
| P2 | 65 | 207 | 8,5 | 8,6 | 29,7 | 4,1 |
| P3 | 65 | 211 | 6,8 | 7,6 | 33,0 | 3,2 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variabel | P1 | P2 | P3 | Terbaik | Terjelek | Terbaik-Terjelek | P1-Terjelek | P2-Terjelek | P3-Terjelek |
|
| NILAI ENERGI | 195 | 207 | 211 | 211 | 192 | 19 | 3 | 15 | 19 |
| KADAR KH | 27,8 | 29,7 | 33 | 33 | 27,8 | 5,2 | 0 | 1,9 | 5,2 |
| KADAR PROTEIN | 7,4 | 8,5 | 6,8 | 6,8 | 5,4 | 1,4 | 2 | 3,1 | 1,4 |
| KADAR LEMAK | 8 | 8,6 | 7,6 | 5,5 | 8,6 | -3,1 | -0,6 | 0 | -1 |
| KADAR SERAT | 3,5 | 4,1 | 3,2 | 2,9 | 4,1 | -1,2 | -0,6 | 0 | -0,9 |
| WARNA | 2,8 | 2,4 | 2,35 | 3,55 | 2,35 | 1,2 | 0,45 | 0,05 | 0 |
| AROMA | 2,8 | 2,85 | 2,95 | 3,05 | 2,8 | 0,25 | 0 | 0,05 | 0,15 |
| TEKSTUR | 3,35 | 2,45 | 2,55 | 3,35 | 2,45 | 0,9 | 0,9 | 0 | 0,1 |
| RASA | 3,45 | 2,1 | 2,45 | 3,45 | 2,1 | 1,35 | 1,35 | 0 | 0,35 |

Data Hasil Pengamatan Mutu “Snack Bar”

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TARAF PERLAKUAN | VARIABEL | | | | | | | | |
| NILAI ENERGI | KADAR KH | KADAR PROTEIN | KADAR LEMAK | KADAR SERAT | WARNA | AROMA | TEKSTUR | RASA |
| P1 | 195 | 27,8 | 7,4 | 8 | 3,5 | 2,8 | 2,8 | 3,35 | 3,45 |
| P2 | 207 | 29,7 | 8,5 | 8,6 | 4,1 | 2,4 | 2,85 | 2,45 | 2,1 |
| P3 | 211 | 33 | 6,8 | 7,6 | 3,2 | 2,35 | 2,95 | 2,55 | 2,45 |

Tabulasi Hasil Ranking Pentingnya Peranan Variabel Terhadap Mutu “Snack Bar” dan Bobot Masing-Masing Variabel.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Responden | Variabel | | | | | | | | |
| Nilai Energi | Kadar KH | Kadar Protein | Kadar Lemak | Kadar Serat | Rasa | Aroma | Teksur | Warna |
| 1 | 4 | 9 | 3 | 6 | 7 | 8 | 5 | 1 | 2 |
| 2 | 9 | 8 | 5 | 2 | 7 | 6 | 4 | 3 | 1 |
| 3 | 7 | 9 | 2 | 1 | 8 | 6 | 5 | 4 | 3 |
| 4 | 5 | 9 | 7 | 6 | 8 | 3 | 4 | 2 | 1 |
| 5 | 5 | 8 | 4 | 3 | 9 | 7 | 2 | 6 | 1 |
| 6 | 8 | 9 | 4 | 5 | 7 | 6 | 2 | 3 | 1 |
| 7 | 8 | 9 | 4 | 5 | 7 | 6 | 3 | 2 | 1 |
| 8 | 9 | 8 | 6 | 3 | 7 | 2 | 1 | 4 | 5 |
| 9 | 7 | 6 | 5 | 4 | 3 | 9 | 8 | 2 | 1 |
| 10 | 5 | 7 | 4 | 5 | 3 | 8 | 1 | 9 | 2 |
| Jumlah | 67 | 82 | 44 | 40 | 66 | 61 | 35 | 36 | 18 |
| Rata-rata | 6,7 | 8,2 | 4,4 | 4 | 6,6 | 6,1 | 3,5 | 3,6 | 1,8 |
| Ranking | II | I | V | VI | III | IV | VIII | VII | IX |
| Bobot Variabel | 0,82 | 1,00 | 0,54 | 0,49 | 0,80 | 0,74 | 0,43 | 0,44 | 0,22 |

*Lampiran 10*

Daftar Nilai Untuk Penentuan Taraf Perlakuan Terbaik

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| VARIABEL | BV | BN | P1 | | P2 | | P3 | |
| Ne | Nh | Ne | Nh | Ne | Nh |
| NILAI ENERGI | 0,820 | 0,150 | 0,158 | 0,024 | 0,789 | 0,118 | 1,000 | 0,150 |
| KADAR KH | 1,000 | 0,182 | 0,000 | 0,000 | 0,365 | 0,067 | 1,000 | 0,182 |
| KADAR PROTEIN | 0,540 | 0,099 | 1,429 | 0,141 | 2,214 | 0,218 | 1,000 | 0,099 |
| KADAR LEMAK | 0,490 | 0,089 | 0,194 | 0,017 | 0,000 | 0,000 | 0,323 | 0,029 |
| KADAR SERAT | 0,800 | 0,146 | 0,500 | 0,073 | 0,000 | 0,000 | 0,750 | 0,109 |
| WARNA | 0,740 | 0,135 | 0,375 | 0,051 | 0,042 | 0,006 | 0,000 | 0,000 |
| AROMA | 0,430 | 0,078 | 0,000 | 0,000 | 0,200 | 0,016 | 0,600 | 0,047 |
| TEKSTUR | 0,440 | 0,080 | 1,000 | 0,080 | 0,000 | 0,000 | 0,111 | 0,009 |
| RASA | 0,220 | 0,040 | 1,000 | 0,040 | 0,000 | 0,000 | 0,259 | 0,010 |
| TOTAL | 5,48 |  |  | 0,426 |  | 0,424 |  | 0,635 |

Lampiran 11. Hasil Analisis Laboratorium Taraf Perlakuan Terbaik

