



BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Pada penelitian pembuat *gummy candies* dengan gelatin sebagai *gelling agent*, dapat ditarik kesimpulan sebagai berikut:

1. Penambahan rasio gelatin/air hingga 0,998 akan menyebabkan jaring-jaring gelatin semakin rapat sehingga dapat mengurangi kadar air produk.
2. Penambahan glukosa hingga 38%-b/b akan memperbaiki struktur gelatin menjadi lebih panjang, berlapis, dan kuat serta akan menarik sebagian besar air sehingga dapat menurunkan kadar air produk dan menghambat degradasi likopen.
3. Penambahan sari buah tomat sampai 34%-b/b akan menambah *total solid* (termasuk likopen) dalam formulasi sehingga pembentukan ikatan ionik menjadi lebih sedikit yang menyebabkan kadar air produk akan meningkat, terhambatnya penurunan antioksidan dan menurunkan tingkat kekerasan serta kekenyalan dari *gummy candies* yang dihasilkan.
4. Formula optimum pada pembuatan *gummy candies* tomat adalah rasio gelatin/air 0,9 dengan kadar glukosa 37,0 %-b/b serta kadar sari buah 30,47%-b/b.

5.2 Saran

Berdasarkan hasil penelitian yang diperoleh, saran yang dapat disusun untuk penelitian selanjutnya adalah:

1. Perlu adanya pengolahan terlebih dahulu terhadap buah tomat yang digunakan untuk mengurangi kadar air dari buah tomat. Salah satu caranya dapat menggunakan alat *spin* dimana air yang ada dapat dikurangi dengan menggunakan energi mekanik sehingga kandungan likopen yang ada tetap utuh.
2. Perlu adanya penelitian lebih lanjut mengenai cara pembuatan *gummy candies* yang tepat untuk mempertahankan kandungan likopen mengingat terjadinya penurunan yang cukup besar pada kandungan likopen akibat adanya pemanasan selama proses pembuatan *gummy candies*. Salah satu cara yang dapat digunakan adalah dengan menggunakan alat dehidrator.
3. Perlu adanya pengawet berbasis bahan alami seperti gula, asam sitrat, dan lain-lain mengingat daya simpan produk hanya 2 hari



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