

INTISARI

PENGEMBANGAN PRODUK OLAHAN BOLU BERBAHAN TEPUNG KACIDE (KAPRI, KECIPIR, DAN TEMPE KEDELAI) TINGGI BCAA (BRANCHED CHAIN AMINO ACID) UNTUK ATLET WEIGHT SPORT

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Latar Belakang : Kontraksi otot yang lama dapat menyebabkan kelelahan otot. BCAA adalah zat gizi yang baik untuk mengurangi kelelahan otot. BCAA seringkali digunakan sebagai suplemen oleh olahragawan khususnya pada cabang *weight sport*. BCAA bisa didapatkan dari kacang-kacangan seperti kapri, kecipir, dan tempe kedelai. Salah satu produk olahan yang digemari dan dapat dibuat dari campuran tepung kapri, kecipir, dan tempe adalah bolu.

Tujuan : Penelitian ini bertujuan untuk mengetahui kandungan BCAA (asam amino leusin, isoleusin, dan valin) pada produk bolu KACIDE dan menguji daya terima bolu KACIDE pada atlet *weight sport*.

Metode : Penelitian ini meliputi empat tahap yaitu tahap pembuatan tepung KACIDE, pembuatan bolu KACIDE, pengujian kandungan BCAA menggunakan metode HPLC (*High Performance Liquid Chromatography*), dan uji daya terima produk dari segi warna, aroma, rasa, dan tekstur menggunakan uji kesukaan (*hedonic scale test*).

Hasil : Sajian bolu KACIDE sebesar 50 gram. Kandungan asam amino leusin pada bolu KACIDE 110 mg/sajian, isoleusin 65 mg/sajian, dan valin 70 mg/sajian. Perbandingan kandungan ketiga asam amino 1,7 : 1 : 1 sudah cukup sesuai dengan syarat produk tinggi BCAA dan tidak jauh berbeda dengan kandungan pada produk tinggi BCAA di pasaran. Produk bolu KACIDE cukup disukai oleh olahragawan di lima UKM cabang *weight sport* dari segi warna, aroma, rasa, dan tekstur.

Kesimpulan : Produk bolu KACIDE memiliki kandungan BCAA yang sesuai dengan persyaratan. Produk bolu KACIDE dapat diterima dan disukai oleh olahragawan dari segi warna, aroma, rasa, dan tekstur.

Kata Kunci : BCAA, Bolu, Kapri, Kecipir, Tempe Kedelai, *Weight Sport*.

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ABSTRACT

THE DEVELOPMENT OF SNOW PEAS, WINGED BEANS, AND SOY BEANS TEMPE FLOUR (KACIDE) AS HIGH BCAA (BRANCHED CHAIN AMINO ACID) CAKE FOR WEIGHT SPORT ATHLETE

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Background : Muscle contraction for long time causes muscle fatigue. BCAA can reduce muscle fatigue. Athletes, in particular weight sport often use BCAA as supplement. BCAA can be found in various legumes such as snow peas, winged beans, and fermented soy beans called "Tempe". Cake is the one of snack product which is liked by many people. Cake can be made by snow peas, winged beans, and soy bean tempe (KACIDE) flour.

Objectives : This research wants to know the amount of BCAA (leucine, isoleucine, and valine) in KACIDE cake and to know the acceptance of the product in weight sport athletes.

Methods : This research includes four steps. First step is making snow peas, winged beans, and soy beans tempe flour. Second step is making of KACIDE cake. The next step is examining of BCAA content in KACIDE cake using High Performance Liquid Chromatography method. And the last step is testing the acceptance of KACIDE cake's color, scent, taste, and texture using hedonic scale test.

Results : KACIDE cake serving is 50 gram. Leucine content in KACIDE cake is 110 mg/serving. Isoleucine content in KACIDE cake is 65 mg/serving. Valine content in KACIDE cake is 70 mg/serving. Ratio of each amino acid content is 1,7 : 1 : 1. The ratio of amino acid content in KACIDE cake is appropriate with high BCAA product requirement. The ratio of BCAA in KACIDE cake is similar with BCAA commercial product. Color, scent, taste, and texture of KACIDE cake can be accepted enough by athletes in five weight sport club.

Conclusion : KACIDE cake contains BCAA which is appropriate with the requirement. KACIDE cake's color, scent, taste, and texture can be accepted and liked by athletes.

Keyword : BCAA, Cake, Snow Peas, Winged Beans, Soy Beans Tempe, Weight Sport.

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