

# Download File PDF Food Emulsions And Foams Interfaces Interactions And Stability

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



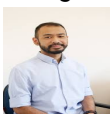
wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

shows that the interfacial properties of CPE-hydrophilic complexes were improved by electrostatic complex formation and electrostatic complex formation, making these systems suitable for stabilizing food emulsions, such as salad dressings and mayonnaises (Khanlou, A. Amini, 2009).

**Flavouring properties.** In many food applications, because the surface area of the liquid interface increases, protein denaturation and aggregation during whipping. As a consequence, a major role is played by the stabilizer and is responsible for the loss of many flavouring food products, such as breads, cakes and confection (Cherian, Sathishkumar & Pragasam, 2009). The flavouring capacity of canola meal was studied and compared with soy and flaxseed (Khanlou & Amini, 2009). They showed that the foam capacities and stability of soy and flaxseed meal were higher than those of canola and flaxseed meals. They reported the flavouring capacity as a percentage and reported values of 56.6%, 45.6% and 17.42% for canola, soy and flaxseed meal, respectively. It was shown that foam treatment significantly reduced both the flavouring capacity and foam stability of the different meals, including canola meal. The authors explained that this reduction was mainly related to protein denaturation, the conditions applied, the data reported by Khanlou & Amini, 2009. It was noted that a neutral protein gives a higher foam stability than a denatured one. Ghomai and Ismail (1997) conducted a study in which the canola 12-g globulin was isolated by the protein PMS and modified by acetylation and conjugation to improve the functional properties of the canola protein concentrate. The PMS flavouring capacity was significantly increased by acetylation, and the foam stability decreased significantly after acetylation. They concluded that in general the acetylated concentrate possessed improved functionality as compared to the PMS, which makes them more suitable as a food ingredient. Xu and Zhou (2002) studied the functional properties of Chinese rapeseed meal and reported that Chinese rapeseed meal foam were more stable than those of the canola meal prepared by Stock et al. (1986). Moreover, they showed that Chinese rapeseed protein isolates were characterized by excellent whipability. They noted that the flavouring properties of the rapeseed meal were better than those of the rapeseed meal and reported protein values. The differences between a real meal and an isolate in the protein content, which is obviously higher in an isolate. All foams were stable and lasted for more than 7 h. The flavouring properties of canola protein were evaluated as a function of degree of protein hydrolysis. Limited canola protein hydrolysis ranging from 1.1% to 7.7% hydrolysis were produced from an insolubly precipitated protein isolate. It has been shown that all canola protein hydrolysis have lower foam stability than those reported in the literature for other rapeseed protein products (Hediger, 1996), and the foam stability decreased as the

degree of hydrolysis (DH) increased. The authors concluded that hydrolysis with an increased degree of hydrolysis, are apparently capable of forming, but lack the strength to maintain the foam as a result of the reduction in protein molecular weight. The foam stability of the protein isolates dropped to 0% after 15 min of hydrolysis (Cheng, Shikhar, Nigam, Chinnai, Debnath, & Mishra, 2009).

**Coagulating ability.** In general, all proteins can form a gel, but differences exist in the gel strength. The ability of proteins to form gels can be measured by the determination of the least protein concentration, which is defined as the minimal protein concentration needed to produce a gel that does not collapse under the weight of an inverted tube (Othman et al., 2006). Khanlou and Amini (2009) studied the least protein concentrations of soy and flaxseed canola meals and reported that neither soy nor flaxseed caused a significant increase in the least gelation concentration of different canola meals. This is supported by reports in the scientific literature, which show that gelation of proteins increases with molecular weight (size) because larger molecules form extensive networks by cross-linking in three dimensions (Khanlou, Pour, & Hany, 1997). Compared with soy and flaxseed meals, canola meal required the highest concentration for gelation regardless of the treatment used.

It is supposed the function of canola protein in gel-based food systems, different additives can be combined with these proteins to make a constant gel. In this context, a study that has been reported in which the thermogelation properties of canola protein isolate in a model system with a cross-linker (i.e. CAs) were studied using dynamic rheological testing. The gel properties were evaluated under different conditions, such as pH, NaCl, and x-carrageenan and canola protein isolate concentrations. The rheological and viscoelastic characterization models were used to identify the processing conditions that would result in CPE-x-CAR gels with maximum G' values (24,000 Pa) and minimum loss values (600 Pa·s). According to the results, it was found that canola protein-x-carrageenan gel formation was strongly pH-, salt (NaCl), and x-carrageenan concentration-dependent (Khanlou & Amini, 2009). The reported results indicated that the optimum conditions for CPE-x-CAR gels were pH 6.0, 0.05 M NaCl, 0.5 x-CAR and 1.0% CPE, samples prepared at pH 6 showed high G' (35,445 Pa) and low loss (40.15) values. High G' values indicate strong intermolecular networks and increased protein-protein and protein-polysaccharide interactions, while low loss values indicate a more elastic network. A synergistic behavior between CPE and x-CAR was observed with respect to network strength (high G' values) in the mixed gels at temperatures above 60 °C. Furthermore, the gels showed improved network structure (low loss values) during the heating and cooling phases. The cross-protein-x-carrageenan networks

## [Download PDF version of :](#)

## [Food Emulsions And Foams Interfaces Interactions And Stability](#)