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METHOD FOR CASCADED PROCESSING OF FRESH ALGAE

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The present invention relates to a method for processing fresh algae at ambient temperature by subjecting algae to an osmotic shock and treating the disrupted algae with an enzyme composition comprising cell wall degrading enzymes. This gentle process at ambient temperature allows for the isolation of algal protein which has good solubility, also in the presence of salt and good foaming, emulsifying and water binding properties. Another advantage is that this method of protein isolation allows for cascaded biorefinery, since protein isolation may be followed by a treatment of the remaining biomass with carbohydrate degrading enzymes to produce clean biogas in high yields and a mineral rich water stream in anaerobic digestion.