

THE SECRET OF A HOMOGENEOUS SALAD DRESSING

How to make a homogeneous and stable salad dressing



THE SECRET OF STABLE AND HOMOGENEOUS SALAD DRESSING IN PROFESSIONAL COMPANIES IS NOT ONLY THE KNOW-HOW, BUT ALSO THE SCIENTIFIC BACKGROUND OF THE COMPOSITION AND BEHAVIOR OF THE INGREDIENTS IN A SALAD DRESSING, AS WELL AS THE USE OF THE RIGHT EQUIPMENT.

There are many mysteries, which are not questioned and are accepted as they are. People are satisfied with the thought or are aware of the effort to find out the answer and discard the idea to deal with the solution of the problem. One such question is, for example, why the salad dressing in the restaurant is always so creamy and homogeneous and why, privately, even after wildly beating it with a whisk, you still get a separation of the vinegar and the oil.

SCIENTIFIC CONSIDERATION OF THE COMPOSITION

In the simplest case, a salad dressing consists of vinegar, oil and herbs. Vinegar and oil are difficult to mix because vinegar is hydrophilic, i.e. it loves water, and oil is hydrophobic, i.e. it repels water. If you want to bring these two phases together, you create an emulsion in which the oil droplets are surrounded by the vinegar. However, this requires an emulsifier. In general, the acceptance of emulsifiers by consumers is very low. Therefore, a natural emulsifier or interface-stabilizing substances are usually used for this purpose. This is where mustard comes into play. Mustard has the property of settling at the boundary between vinegar and the oil droplet, thus forming a "bridge" to unite the two liquids that do not "love" each other at all. Mustard can be replaced with milk, yogurt or eggs whose proteins now become responsible for the stabilization.



THE DROPLET SIZE MATTERS

In the kitchen, a fork is often used, a whisk or even a hand blender to make a stable salad dressing. It can be observed that with the fork it must be mixed quite intensively and long to achieve a uniform consistency, whereas this can be achieved with a hand blender but in less time.

Thus, a certain amount of energy is required (compared to sweat when using the fork or the whisk) to mix the oil droplets in the vinegar. This is called dispersing or emulsifying because an emulsion is produced. The more energy, the smaller the oil droplets and the more stable the salad dressing. If the stability is not guaranteed, separation is evident. In this case the oil rises (creaming). With a little more mustard or more sweat or energy, this can be counteracted. Restaurant kitchens often use dispersers or homogenizers that surpass the everyday home hand blender in power, efficiency and quality. The oil droplets are dispersed so small that the salad dressing gets a very stable and incredibly fine structure and this is perceived so positively by the guest in the restaurant.

EFFICIENT HOMOGENIZATION WITH KINEMATICA EQUIPMENT

Efficient dispersing or homogenizing is important for salad dressing quality and also saves time. Kinematica has a great expertise in the production of salad dressings, sauces and marinades and is present in quite a few catering and food production companies. Our application experts will be happy to advise you on applications ranging from very small quantities to large production volumes. Contact us and convince yourself of our quality.



FREE TRIALS POSSIBLE

Kinematica offers free trials until the end of the year for companies or individuals who would like to test their products with Kinematica equipment. Further details can be found on the link below. Convince yourself of the many years of experience and quality and get to know our Swiss family business.

Book your date

Kinematica AG

Werkstrasse 7 c-d / 6102 Malters / Switzerland
Phone +41 41 259 65 65 / Fax +41 41 259 65 75
info@kinematica.ch / kinematica.ch