



Mulhoe

Cold Raw Fish Soup | 물회



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Mulhoe is an advanced cold soup that leverages thermodynamic shock and precise pH control. By submerging raw seafood in a hyper-chilled, highly acidic broth, the myofibrillar proteins violently contract, creating a remarkably bouncy, snappy texture. The high concentration of acetic acid (vinegar) in the gochujang broth acts chemically to neutralize volatile fishy odors (trimethylamine) while inducing a slight surface denaturation akin to ceviche.

 **Total:** 20 mins | **Prep:** 20 mins | **Cook:** 0 mins (Raw) |  **Difficulty:** Moderate (Requires sharp knife skills and precise broth balancing) |  **Profile:** Icy, Tart, Sweet, and Bracingly Refreshing |  **Focus:** Thermal Shock, Hydration, and Lean Protein

Ingredients (2 servings)

- **Main Ingredients (Seafood):** 250g assorted sashimi-grade seafood (squid, abalone, white fish, conch, swordtip squid, etc.)
- **Vegetables & Fruit:** 1/2 cucumber, 1/4 Asian pear, 1/4 onion, 50g cabbage, 5 perilla leaves, 1 green chili
- **Cryogenic Aqueous Medium:** 2 cups (400ml) ice water (or commercial cold noodle broth), ice cubes
- **Hypertonic Seasoning Base:** 3 tbsp gochujang, 1 tbsp gochugaru, 3–4 tbsp vinegar, 2 tbsp sugar (or agave syrup), 1 tbsp minced garlic, 1 tbsp plum extract (maesil-cheong), 1 tbsp sesame seeds, 0.5 tbsp sesame oil (for tossing seafood)

Allergy Information Contains: Seafood (Fish, Squid, Abalone, Conch, etc.), Soy, Wheat (from gochujang)

Equipment Highly sharpened Sashimi or Chef's Knife, Sanitized Cutting Board, Large Mixing Bowls, Plastic Wrap

Cooking Instructions

1. **Structural Slicing & Chilling:** To break down dense collagen, score and thinly slice the abalone. Julienne the squid into fine noodles. Slice the white fish diagonally (sogisseolgi). Toss the prepared seafood very gently with 0.5 tbsp of sesame oil to create a hydrophobic flavor barrier, then chill immediately in the refrigerator.
2. **Vegetable Osmotic Prep:** Finely julienne the cucumber, Asian pear, onion, cabbage, and perilla leaves to a uniform thickness. (The fructose and proteases in the pear add natural sweetness and tenderize the bite.) If the

onion is too pungent, soak it in cold water for 5 minutes to leach out the volatile sulfur compounds.

3. **Acid-Base Sauce Formulation:** In a large bowl, whisk together the gochujang, gochugaru, vinegar, sugar, minced garlic, and plum extract until it forms a thick, hypertonic paste.
4. **Broth Integration & Thermal Shock:** Pour the 400ml of ice water (or cold noodle broth) into the seasoning paste and whisk until completely dissolved. Add ice cubes immediately to drop the temperature near the freezing point (0°C).
5. **Assembly:** In chilled serving bowls, construct a bed of the julienned vegetables and pear. Mound the chilled seafood on top. Just before serving, pour the hyper-chilled spicy broth over the ingredients and garnish with sliced green chilies and sesame seeds.

Professional Culinary Tips

- **Thermodynamics of Protein Contraction:** Warm or room-temperature raw fish feels mushy due to relaxed muscle fibers. When the seafood plunges into the near-freezing broth, the extreme thermal shock forces the protein matrices to contract violently. This results in the intensely chewy, bouncy texture that defines a perfect Mulhoe.
- **Chemical Denaturation via Acetic Acid:** The heavy use of vinegar is not merely for flavor. The acidic environment slightly denatures the outer layer of the raw proteins (a chemical cooking process similar to ceviche). More importantly, the acid binds to trimethylamine (TMA)—the compound responsible for fishy odors—neutralizing it completely.
- **Osmotic Balance & Ice Melt:** As the dish sits, osmotic pressure from the salty/sweet broth extracts cellular water from the vegetables, and the ice cubes melt (absorbing heat via enthalpy of fusion). The initial broth must be formulated slightly stronger in salinity and acidity to account for this gradual dilution, ensuring perfect balance until the bowl is finished.

Nutrition Facts (Estimated)

Total Content : Approx. 500g (1 serving, including broth)

Calories : 240 kcal

– Sodium : 1,250mg

– Total Carbohydrate : 30.0g

– Sugar : 18.0g

– Total Fat : 3.5g

– Saturated Fat : 0.5g

– Cholesterol : 110.0mg

– Protein : 24.0g

– Calcium : 80.0mg

*Daily Values are based on a 2,000 calorie diet and standard Korean nutritional

reference values

**Nutritional values are calculated based on original ingredients; substitutions may alter specific macronutrients.

The Icy Symphony of Oceanic Chill and Tangy Gochujang Broth: A Lyrical Masterpiece of Mulhoe and Summer Refreshment

Mulhoe (Raw Fish Cold Soup) stands as the brilliant, refreshing, and deeply restorative pinnacle of Korean coastal gastronomy, where fresh marine catches—such as snappy squid, tender abalone, conch, spear squid, and damselfish—are finely sliced, tossed with crisp garden vegetables and spicy-sweet gochujang seasoning, and submerged in an ice-cold broth that revitalizes the senses from the very first spoonful. Born from the resourceful traditions of coastal fishermen seeking a quick, nourishing meal on turbulent waters, this iconic cold soup turns the raw bounty of the sea into an exquisite sanctuary of flavor and chill.

The moment the icy, tangy broth touches the palate, an exhilarating wave of clean acidity and fiery gochujang punch awakens the taste buds. This is swiftly followed by the resilient chew of the fresh seafood and the refreshing crunch of sliced vegetables, creating a multi-dimensional sensory rhythm that banishes oppressive heat. The natural sweetness of the seafood, tightened by the numbing chill of floating ice crystals, harmonizes with the bold savory glaze to deliver an unforgettable sensory experience.

True gastronomy does not rely exclusively on intense heat; it flourishes in the culinary wisdom of harmonizing icy natural freshness with restorative spices to revive depleted vitality. Savoring a chilled bowl of Mulhoe adorned with floating ice crystals today is an invigorating and elegant ritual—clearing away oppressive summer fatigue and infusing the soul with crisp, sun-cleansed maritime vitality.

Editor's Review

1. An Electrifying Cadence of Tangy Gochujang Broth, Snappy Seafood Resilience, and Crisp Vegetable Crunch

The moment the ice-cold, translucent broth of Mulhoe coats the palate, an immediate wave of vibrant gochujang depth and refreshing acidity awakens the taste buds with invigorating punch. This is swiftly followed by the springy, resilient chew of fresh squid, abalone, or damselfish and the crisp snap of garden vegetables, orchestrating an endlessly refreshing, multi-layered sensory thrill that eliminates any trace of summer lethargy.

2. Low-Temperature Osmotic Broth Equilibrium and Capsaicin-Taurine Metabolic Stimulation Kinetics

Mulhoe represents an exacting study in marine food physics and temperature-controlled biochemistry. The low-temperature ice-broth matrix preserves the structural elasticity of raw myofibrillar proteins, ensuring an optimal snap, while capsaicin stimulates peripheral circulation. Concurrently, abundant taurine and essential amino acids released from the fresh seafood establish an optimal nutritional matrix for systemic recovery and electrolyte balance during hot weather.

3. The Coastal Heritage of Fishermen Resilience and the Grounding Sanctuary of Summer Vitality

Found gracing coastal ports and summer dining tables across the nation as a cherished regional anchor to beat the heat, a modest bowl of raw fish cold soup serves as an enduring emotional haven against daily weariness. Revered for generations as an essential restorative tonic that cools the core and awakens the appetite, enjoying this honest, refreshing dish washes away modern stress, granting a timeless sanctuary of stillness, coastal heritage, and grounded culinary happiness.

