

From the Laboratory to the Kitchen: Research Enhancement and Life Enlightenment

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Introduction

Before setting foot on Norway, a land gently caressed by the Northern Lights and carved by deep fjords, my understanding of this country was limited to the geographical label of "the Land of Ten Thousand Islands" and the culinary legend of "the Hometown of Salmon". As a Chinese medical student, I embarked on a two-week academic exchange journey in Norway, filled with great enthusiasm for scientific research and intense curiosity about life in a foreign land.



In Trondheim, we visited the solemn Nidaros Cathedral, participated in the lively Fadder Week, and tasted delicious salmon and flavorful tacos. In Ålesund, we joined the unique "bar to bar" activity, climbed to the top of the mountain in the city center to enjoy a panoramic view of the whole city, and had a pleasant chat with Norwegian students about their daily lives... These experiences were extremely interesting, and many of them were impossible to experience or even imagine back in China.



Among these numerous experiences, I observed a rather interesting phenomenon: students at the Norwegian University of Science and Technology (NTNU) could leave school on time at 3 p.m., with no trace of anxiety or hesitation on their faces. At first,

this confused me a lot—after all, in the scientific research culture we were familiar with, working late into the night seemed to be the norm. However, as time went by, I gradually understood the unique Nordic philosophy of life behind this: working efficiently is for the sake of a better life, not at the cost of sacrificing life. This concept made me start to reflect: is it possible for us to find a better balance between scientific research and life?

Today, I would like to share the insights I gained from this trip with you, and I have titled this sharing "From the Laboratory to the Kitchen". We need to find our own balance between the rigor of scientific research and the warmth of life. In the following content, through the unique perspective of food culture, this article will take you to truly experience how Norwegians achieve the harmony between work and life in a simple yet profound way. It is my hope that this sharing can bring some inspiration to you.

Research Enhancement

In the first week, we arrived in Trondheim, the technological capital of Norway, to visit the Norwegian University of Science and Technology (NTNU). In sharp contrast to the hustle and bustle of Beijing, there were no skyscrapers standing in rows here; instead, brightly colored wooden houses nestled between green mountains and fjords, exuding a sense of tranquility and beauty. The air was fresh and cool, and people walked at an unhurried pace. This initial feeling of serenity was completely different from the fast-paced and highly competitive domestic environment I was accustomed to.

The city tour allowed me to see another side of Trondheim. We visited Nidaros Cathedral and climbed up the narrow and steep tower. Although climbing the stairs was a bit tiring, when we reached the top and looked down at the panoramic view of the entire city, we felt that all the hard work was worthwhile. More importantly, during this process, I deeply felt the Norwegians' respect and protection for history—every detail reflected their emphasis on cultural heritage. We also went hiking in the forest, fully enjoying the magnificent natural scenery of Norway. The towering

ancient trees and clear streams all made us feel relaxed and happy.



At the same time, we entered the medical laboratory of the Norwegian University of Science and Technology for a visit. The laboratory was clean and spacious, with various instruments and equipment neatly arranged. The Norwegian teachers and students were warm and attentive. Under their guidance, we experienced experimental operations such as sectioning and staining, and each step gave us a more intuitive understanding of medical experiments. At the welcome ceremony held in the center of the laboratory, I truly felt the difference between Chinese and Norwegian educational concepts for the first time. The professor not only introduced the situation of the Department of Biomedical Laboratory Science in detail but also emphasized the concept of "learning for a better life", which made me have a new understanding of the significance of learning.





In the second week, we moved to Ålesund, a picturesque coastal town. The learning focus here was extremely targeted and practical: the mechanisms of coagulation and anticoagulation, as well as the related practical clinical skills. We conducted in-depth learning on the complex pathways of the Coagulation Cascade and discussed in detail the mechanism of action of anticoagulant drugs such as warfarin. Each knowledge point was like a piece of a puzzle, gradually forming a complete understanding of this field in our minds.



After the theoretical learning, we entered the laboratory and personally performed the semi-automatic and automatic tests of the International Normalized Ratio (INR). INR is a key indicator for monitoring the effect of anticoagulant therapy, and in China, this work is usually undertaken by professional personnel in the clinical laboratory department. However, in Norway, the teachers encouraged every one of us medical students to understand its principles and conduct the operation ourselves. When I completed the sample processing, reagent addition, and instrument reading step by step on my own and finally obtained an accurate INR report, the sense of accomplishment of "solidifying" the theoretical knowledge in my mind through

practice was unparalleled, which was far more profound than simply listening to lectures in class.



Immediately after that came an even more challenging part: the venipuncture practice. Under the detailed safety explanations and close guidance of the Norwegian teachers, we practiced repeatedly on the simulated teaching aids. From being nervous and unskilled at the beginning to gradually becoming proficient later, every bit of progress was inseparable from the teachers' patient guidance. This was a teaching method that I had not experienced in China, and it made me deeply realize the importance of practice in medical learning. At the same time, during the operation of the molds, we also attached great importance to the details and standardization of each operation, because we were well aware that in future clinical work, these details might be related to the health and safety of patients.



Life Enlightenment

A Culinary Journey

This was our culinary journey in Norway, and every dish carried unique memories and stories.



On the first day, considering our preference for hot food, the Norwegian teachers prepared bread and a soup similar to spicy bean soup for our lunch. Later, we learned that this might be a type of Italian soup, which contained ingredients such as carrots, celery, green beans, and macaroni. The warm soup slid down our throats, dispelling the slight chill we felt upon arriving in a foreign country.

After dinner, an interesting thing happened: we took the leftover French fries out of the restaurant and fed them to the seagulls in the central square. In China, there is a quite popular internet meme related to seagulls and French fries: "Go to the pier to get some French fries". It comes from the comic "What Can I Have on My Mind" by the Canadian artist Joshua Buckman. The absurd dialogue between two seagulls in the comic about the meaning of survival subtly metaphorizes the life state of human beings rushing about for basic needs. At this moment, the scene of feeding seagulls in a foreign country gave a more vivid interpretation to this internet meme.



In fact, those seagulls would take the initiative to approach the French fries in

people's hands and snatch the food from their hands quickly in an unobtrusive way. They looked both smart and cute, adding a lot of fun to our journey.

During our stay in Norway, we tasted many local specialty foods.

Brunost is a dairy product made from whey (a by-product of cheese making) that has been boiled for a long time to concentrate it. Originating in Norwegian peasant culture, Brunost was invented by reusing the whey left over from traditional cheese making in order not to waste a single drop of nutrition, and is now an essential part of Norwegian life, especially at breakfast. Despite the name, it is closer to a concentrated lactose caramel in terms of production process and ingredients.

02. food culture

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02. food culture

Waffles

Norwegian waffles are a common food in Norwegian daily life. They can be served for breakfast with coffee or tea to start the day, as a dessert for lunch or dinner to add a sweet flavour to the meal, or in the afternoon at tea time to share with friends or family and enjoy a relaxing time. In Trondheim, we enjoyed our waffles while listening to the student choir Candiss.



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Rømmegrøt (cream porridge) is one that must be mentioned. It is a traditional porridge made by boiling sour cream, flour, and milk. It has a thick and smooth texture, and when drizzled with butter and cinnamon sugar, it tastes warm and satisfying. We learned that in Trondheim, people usually eat it during Christmas. This bowl of porridge reminded me of our Laba porridge involuntarily. Although the ingredients are completely different, the warmth of home, the sense of ritual of festivals, and the emotions passed down from generation to generation contained in them are so similar. Foods may be different, but emotions can always resonate across regions and cultures.

 02. food culture

 **Rømmegrøt (creamy congee)**

"rømmedeiggrøt"

This is a **traditional porridge** made with sour cream, flour, and milk that is thick and creamy. It's drizzled with butter and cinnamon sugar for a warm and satisfying meal. It's common to have it on **Christmas Day in Trondheim**. This bowl of congee reminds me of our LABA congee. Even though the ingredients are very different, the warmth of home, the rituals of the festival, and the emotions passed down from one generation to the next are so much in common. The food may be different, but the emotions always resonate.



 02. food culture

 **Salmon**

Salmon is a big deal in Norway, and it's eaten in a pretty simple and traditional way. In addition to the classic smoked salmon, locals like to eat it plain, fried, or grilled with a squeeze of lemon juice to keep it from losing its flavor. This confidence and respect for quality ingredients, and Chinese culinary concept of shaping and enhancing flavor through techniques like steaming, boiling, simmering, and broiling, show the **different approaches of the two food philosophies**: one seeks to manifest nature, the other seeks to transform it.



On the fourth day, we had an in-depth experience of Norway's salmon culture. As a symbol of "the Country of Fjords", salmon is eaten in a more simple and direct way in Norway. In addition to the classic smoked salmon, local people prefer to fry or grill the salmon simply and then squeeze some lemon juice on it, which can retain its original flavor to the greatest extent. This kind of confidence and respect for high-quality ingredients, together with the concept in Chinese cuisine of shaping and enhancing flavors through various techniques such as steaming, boiling, braising, and roasting, shows the different aspects of the two culinary philosophies: one pursues to highlight the nature of ingredients, while the other pursues to transform nature, each with its own unique charm.

In Ålesund, we made a lot of delicious food by ourselves, and many interesting stories happened during the cooking process. For example, we made tomato soup with thickeners, and later, we had a sudden idea to combine the thickeners with instant noodles, which unexpectedly turned into a bowl of instant noodles with a unique flavor. We also fried potato slices and ham, heated pizza, fried meatballs, made hamburgers with fried meat patties, and cooked cola chicken wings, etc. Each dish was created by our own hands, filling us with a sense of accomplishment.

 02. food culture

We made a lot of our own tasty treats in Ålesund.



 02. food culture

We made dumplings together.



What is most worth mentioning is that we made dumplings at home. Senior Shengqi minced the filling by hand, Chef Yang rolled out the dumpling wrappers, and

everyone worked together. The dumpling filling was a mixture of pork, corn, green onions, and prawns, and it tasted delicious. Being able to taste the flavor of our hometown in a foreign country brought an indescribable warmth to us and made our team more united and harmonious.

Differences and Connections Between Norwegian and Chinese Food

Firstly, it is the in-depth reliance on and ultimate utilization of local ingredients. Norway's long coastline has nurtured rich marine resources. The salmon we tasted had fresh and tender meat, which is a representative of its "seafood diet"—local people are good at highlighting the original flavor of ingredients through simple cooking methods (such as frying and grilling) rather than relying on complex seasonings. In addition, dairy products account for a very high proportion in the diet. For example, Brunost (brown cheese) is made by concentrating cow's milk or goat's milk, with a unique caramel-like sweet fragrance. It is a common choice for Norwegians to have with breakfast or bread, reflecting the full development of animal husbandry resources in Northern Europe.

Secondly, it is the dietary rhythm of "valuing snacks over staple foods". The sense of "staple food" is relatively weak in daily diet, and instead, a variety of snacks take its place. Waffles, which we encountered frequently, are a typical example. In street stalls or cafes, waffles are often served with cream, jam, or berries as a snack or afternoon tea. Although Risgrøt (cream porridge) has a certain satiety, it is more inclined to be a dessert or breakfast rather than a staple food for main meals. This "snack-oriented" dietary pattern reflects the flexible and relaxed eating habits of Norwegians.

Thirdly, it is the simple and efficient dining scenario, which is especially prominent in lunch. We chose Italian-style soup for lunch because the restaurant prices were relatively high, and this just conformed to the Norwegians' lunch habits: they rarely spend time on complex lunches, and are more inclined to choose quick and affordable light meals (such as soup and sandwiches). Most people bring their own lunches or choose light food. Behind the phenomenon of "not going out for lunch"

lies the emphasis on time efficiency and a low-key attitude towards life. At the same time, international elements have also been integrated into the diet. The emergence of foreign foods such as sushi and tacos reflects Norway's tolerance for multiculturalism.

The differences between Norwegian food and Chinese food are very obvious:

In terms of the staple food system, Chinese food is dominated by rice and noodles. Rice, noodles, and steamed buns are "necessities" for every meal, and the complete structure of "staple food + side dishes" is emphasized. However, Norwegian food downplays the concept of staple food. Foods such as waffles and cream porridge are more functional (such as supplementing energy and satisfying appetite), and there is no dietary logic similar to that in China where "a meal must have a staple food".

In terms of cooking concepts, Chinese cooking emphasizes the "harmony of five flavors". There are various techniques such as stir-frying, stewing, steaming, and deep-frying, and a rich variety of seasonings (such as soy sauce, chili, and spices) are used to pursue complex and layered flavors. On the other hand, Norway adheres to the concept of "less is more", and the core of cooking is to retain the original flavor of ingredients. The simple frying of salmon and the light soup base of lamb meatball soup all reflect the adherence to "original flavor".

In terms of the social attribute of dining, Chinese lunches often have a social function. When family members or colleagues have meals together, they pay attention to the variety of dishes and the sense of sharing. However, Norwegian lunches are more "personalized", emphasizing convenience and efficiency, and it is rare to take lunch as a social occasion, which forms a sharp contrast with the Chinese culture where "the dining table is a social venue".

The connection between the two lies in their common pursuit of the essence of diet: both attach importance to the freshness of ingredients. China emphasizes "not eating food out of season" and obtains seasonal ingredients in accordance with natural laws; Norway relies on seafood caught on the same day and seasonal berries, also respecting the gifts of nature. Both have "signature foods" with distinct regional characteristics. China has eight major cuisines, and each cuisine carries the local customs and traditions; Norway has exclusive flavors such as brown cheese and lamb

meatball soup, which are the taste symbols of its culture. Moreover, both are accepting of foreign cultures—Chinese food has absorbed elements of Western food and Japanese food, enriching its own dietary system; Norway has also integrated foreign foods such as sushi and Italian soup, showing the inclusiveness of its food culture.

Summary

Although this trip to Norway was short, its impact on me was extremely profound. I not only learned practical medical skills such as INR testing and venipuncture but also, more importantly, experienced a different medical education model and cultural atmosphere. This two-week journey was far more than just tasting food—it allowed us to gain an in-depth understanding of how the economies and societies of Norway and China shape different daily lives. Norway's relatively high living standard and emphasis on work efficiency have made lunch a quick and casual affair, which is completely different from the lively lunch social gatherings in China. The fresh salmon and local brown cheese are evidence that Norway's economy develops by making sustainable use of natural resources; while China's rich and diverse cuisines reflect its vast territory and prosperous food industry.

From a social perspective, Norway's relaxed snack culture and casual dining atmosphere reflect the leisurely attitude towards life of local people. However, we also found that shared foods like waffles can also shorten the distance between community members. In China, food-centered gatherings highlight that the dining table is an important place for maintaining social relationships. Although the two models are different, they both originate from the original intention of enriching life through food, which is particularly interesting. The emphasis on the process, tolerance for failure, and respect for individual differences in Norwegian education have all made me rethink the essence of medicine. Medicine is not only about treating diseases and saving lives but also about the overall care for people. In the laboratory, we pursue scientific precision; in the kitchen, we experience the warmth of humanity. The

combination of these two aspects constitutes the literacy that a complete medical student should possess.



As a junior student, this experience has pointed out the direction for my future medical career. I will carry this cross-cultural experience and reflection with me, and in my subsequent studies, I will pay more attention to the cultivation of practical abilities and the improvement of humanistic literacy, striving to become an excellent medical worker who understands both science and humanistic care.

I would like to express my sincere gratitude to all the people who made this journey unforgettable! Thanks to Teacher Cao for guiding us throughout the trip and enriching our experience with his unique insights. Thanks to all the teachers and students in Ålesund and Trondheim — your enthusiasm, patience, and sincerity in sharing cultural knowledge and good food spots made us feel extremely warm. I also want to thank our partners from Nankai University — exploring new flavors and ideas together made every part of the journey full of fun. This journey is not just a simple learning experience, nor is it just about eating, drinking, and having fun; it is a journey that connects hearts and gains new knowledge, allowing us to see the unique way in which food and life are intertwined in different parts of the world. This

adventure was truly wonderful!