



**Chr. Hansen Holding A/S**  
**Q4 2022/23 Results**  
**Conference Call Transcript**

**12 October 2023**

**PRESENTATION**

**Mauricio Graber**

Thank you. Good morning, everyone, and welcome to the presentation of Chr. Hansen's Q4 22/23 results. I am here with our CFO, Lise Mortensen, and we will walk you through the highlights of our fourth quarter and year-to-date results covering September 1st 2022 to August 31st 2023. And we also provide an outlook for the calendar year 2023, covering January 1st 23 to December 31st 23.

Depending on the timing of the closing of the proposed merger with Novozymes, this might be the last financial statement for Chr. Hansen. Before opening up for Q&A, I will also give a brief update on the progress of the proposed merger with Novozymes. Before moving on, please take notice of the safe harbour statement.

Great. Let's start in slide 3. While we have made progress with the work on the proposed merger with Novozymes, the Chr. Hansen organisation continued its focus on delivering results, and we ended the year with 16% organic revenue growth for the group in the fourth quarter. The fourth quarter was driven by solid volume growth, and we continue to see positive impact from pricing in line with our expectations.

The contribution from euro-based pricing continued to be significant, mainly in food cultures and enzymes. Looking at the year to date, the group delivered strong organic growth of 11%, at the upper end of our guidance range. Both food cultures and enzymes, and health and nutrition, delivered very strong organic growth, driven by pricing and solid volumes in food cultures and enzymes, while the growth in health and nutrition was driven by strong volume and pricing.

EBIT margin before special items reached 28% in the fourth quarter, which was 0.1 percentage points above last year. The improvement was driven by the strong sales development, including the impact from pricing initiatives, which were offset by a negative impact from higher input cost and exchange rates. Year-to-date, the EBIT margin before special items was 26.9%, compared to

26.8% last year. Again, at the upper end of our guidance range for our whole financial year covering the period from September 1st 2022 to August 31st 2023.

Free cash flow before acquisitions and special items amounted to €69 million in the fourth quarter. Year-to-date, the free cash flow before acquisition and special items reached €202 million up from €172 million last year. The higher cashflow was driven by improvement in operating profit and lower taxes paid, which was partly offset by a negative change in working capital.

Please turn to slide 4 for an update on our strategic and operational highlights of the fourth quarter. As I mentioned in the beginning of the presentation, Chr. Hansen continued to focus on business execution and delivering innovative solutions to our customers. That resulted in double-digit organic growth in the lighthouses and our core business.

Starting with the core, the business delivered strong 14% organic growth in the fourth quarter. During the quarter, we continued successful customer collaborations to drive productivity and accelerate innovation in the dairy and plant-based categories. As one of the highlights, I would also mention the introduction in China of live probiotics in the ambient category. This innovation enables our customers to produce shelf-stable yoghurts with our live LGG probiotic cultures in them.

In human health, we introduced a new probiotic strain in the gut-brain area and published its first clinical study in irritable bowel syndrome. The probiotic is an important expansion to our gut health portfolio, further strengthening our offering within the gut-brain area.

The performance for our core business was also strong year-to-date, delivering 10% organic growth. Now, looking at the lighthouses combined, they reached very strong growth both in Q4 and year-to-date, delivering 41% and 24% growth respectively. All the lighthouses reached double-digit growth rates in both Q4 and year-to-date. As the lighthouses combined only account for approximately 10% of group sales, we need to be mindful of looking at the lighthouses on an annualised basis instead of a quarterly basis.

Let's have a look at the lighthouses separately. Bioprotection was driven by pricing, upselling, and new customers with increasing interest in natural solutions. Fermented plant bases continued growing, but from a small base driven by dairy alternatives. Year-to-date, the business remains modest, but we were back to growth compared to last year. We continue to build partnerships with the focus of new product development.

HMO was the largest contributor to growth within the lighthouses. During the quarter, Chr. Hansen received approval from the Chinese authorities with regards to the technology to produce each of three HMOs, 2'-FL, LNT and 3-FL. This approval enables us now to apply for final approval of the three HMOs with the Chinese authorities.

Regarding the final product registrations, we still expect approval of by the end of calendar year 2023 or the beginning of calendar year 2024. Additionally, a new review conducted by Chr.

Hansen scientists of several clinical studies on HMOs was released, which reported beneficial effects of HMO in gut health and immune systems.

Moving on to plant health, the strong performance in both Q4 and year-to-date was driven by its core products, expansion to new regions, and new product launches, providing novel innovations to our customers. In terms of pricing, we continue delivering on our pricing initiatives, and the pricing contribution was 7% for the group in Q4. Food cultures and enzymes had the largest impact from pricing, but also, health and nutrition contributed with a modest impact.

Lastly, in September, we inaugurated our new innovation campus here in Hoersholm, Denmark. The new facility is a representation of innovation, knowledge sharing, and customer support, including the state-of-the-art dairy application centre that is expected to open in 2024.

Let's turn now to slide 5 for the topline performance. The growth in the fourth quarter was driven by solid volume growth and pricing. Pricing continued to contribute while being aligned with expectations, and the total pricing contribution for the group was 7% in Q4 and 6% on a year-to-date basis. The contribution from euro-based pricing continued to be significant in the quarter, predominantly in food cultures and enzymes.

In food cultures and enzymes, organic growth amounted to 16% in Q4. This was driven by both pricing and volume. Dairy delivered strong growth supported by pricing initiative and strong momentum, not only in cheese, but also in fresh dairy. The lighthouses of bioprotection and fermented plant bases also performed well.

Growth was strong in food and beverage, driven by pricing and solid volume. The organic growth year-to-date in food cultures and enzymes was strong at 11%, driven by pricing and also good volume growth. We estimate that the sector outlook for dairy, meat and processed food categories remains challenged. For 2023, we expect flat to slight decline in volume growth, as growth in the cheese segment is expected to be offset by declining markets for fermented milk, meat and processed food.

Health and nutrition delivered 16% organic growth in the fourth quarter, driven by volume growth of 14%, while the impact from pricing was more modest at 2%. Year-to-date, this resulted in an organic growth of 11% in health and nutrition. Human health and HMO delivered very strong growth, mainly driven by volume, but also by pricing. Volumes were strong due to EMEA and North America developing well, while volumes in Asia-Pacific were more modest due to continued market softness in South Korea.

The volume growth was positively impacted by early timing of orders in human health. We estimate that the sector growth in probiotic human health products is in line with the mid-term outlook of 4 to 6%, with continued softness in North America and South Korea, while EMEA and China continue developing positively.

Animal and plant health delivered solid growth, mainly supported by strong growth in plant health and pricing increases in animal health. The growth was positively impacted by timing of orders in animal and plant health.

Please turn to slide 6 for the regional performance. Now, all regions except Asia-Pacific grew double digits in the fourth quarter. And year-to-date, all regions contributed positively to the group organic growth. The Europe, Middle East, Africa region grew 20% organically in Q4, and the growth was also very strong year-to-date at 16%.

The performance was driven by both health and nutrition, and food cultures and enzymes. Health and nutrition was supported by very strong volume growth on pricing initiatives, while food cultures and enzymes was supported by pricing, including euro-based pricing, as well as solid volume growth.

Looking at North America, organic growth reached 15% for the quarter and 7% year-to-date. Organic growth was driven by both health and nutrition, and food cultures and enzymes. Health and nutrition was supported by very strong volume growth and pricing initiatives. Food cultures and enzymes was driven by solid volume growth across categories.

In Asia-Pacific, we reported solid 5% organic growth for the quarter and 4% year-to-date. Organic growth was driven by both food cultures and enzymes, and health and nutrition. China has a positive contribution to the organic growth in food cultures and enzymes. The growth was mainly driven by volume, but also supported by pricing.

Lastly, looking at Latin America, that continued to perform strong and delivered 20% organic growth both in Q4 and year-to-date. Organic growth was driven by both pricing, including euro-based pricing, and volume growth in food cultures and enzymes, while health and nutrition showed a slight decline, mainly due to animal health.

Now, let me hand over to you, Lise, for the financials.

### **Lise Mortensen**

Thank you, Mauricio, and good morning, everyone. Please turn to slide 7 for profitability. Absolute EBIT before special items for the group amounted to €99 million in the fourth quarter, an increase of 8% from €91 million in Q4 of last year. The increase was driven by volume growth, a positive contribution from pricing initiatives, and stable operating expenses, which was partly offset by a negative impact from higher input cost and exchange rates.

EBIT margin before special items reached 28.0% in the fourth quarter up from 27.9% in Q4 last year. The margin improvement was driven by the strong sales development, including the impact from pricing initiatives, which were offset by a negative impact from higher input costs and exchange rates.

Year-to-date, the absolute EBIT before special items was €358 million, an increase of 10% from last year. The EBIT margin before special items year-to-date was 26.9% compared to 26.8% last year.

Looking at the margins per segment, food cultures and enzymes Q4 EBIT margin before special items reached 31.1% compared to 32.5% last year. The decline was mainly driven by higher input cost and negative currency development, which were partly offset by pricing initiatives.

Profitability in health and nutrition improved in the fourth quarter versus last year, driven by a positive impact from scalability and pricing initiatives, which were partly offset by a negative impact from exchange rates and higher input cost. The EBIT margin before special items was 23.0% in Q4 compared to 20.1% last year.

Next, turn to slide 8 for free cash flow. Year-to-date, free cash flow before acquisitions and special items amounted to €202 million, an increase of 17% from €172 million last year. The increase was driven by the improvement in operating profit and lower taxes paid, which was partly offset by a negative change in working capital. The lower taxes paid were due to a one-off tax payment in FY 22 related to the acquisition of HSO. And the negative change in working capital was mainly due to higher trade receivables from timing of orders during Q4 and lower trade payables. Lower cap expense contributed positively.

Looking at return on investor capital excluding goodwill, it was 24.1% year-to-date compared to 24.0% last year. The slight increase was supported by health and nutrition due to the strong sales development, while food cultures and enzymes was down compared to last year.

Please turn to slide 9 for a follow-up on the 12-month outlook. To summarise, regarding the outlook we gave for the 12-month starting September 1st 2022 to August 31st 2023, Chr. Hansen delivered 11% organic growth and 26.9% EBIT margin before special items, at the upper range of our guidance. Free cashflow before acquisitions and special items reached €202 million, on the lower end of the guiding range.

As we have recently changed our financial year to follow the calendar year, I will now go through the outlook for the calendar year 2023. Please turn to slide 10. In light of the performance for the first eight months, the outlook is adjusted for organic growth, revenue growth, and free cashflow before acquisitions and special items, while maintained for EBIT margins before special items. The free cashflow before acquisitions and special items is adjusted mainly due to timing of CAPEX payments.

Organic growth for the remaining four months of 2023 is expected to be driven primarily by pricing growth, including a positive impact from euro-based pricing. While expectations for underlying market growth for the remainder of the calendar year remain modest, given the current uncertain geopolitical and macroeconomic environment, Chr. Hansen expects organic growth to be in the range of 10 to 12%, while the impact from exchange rates on revenue is

expected to be negative, estimated around 6%. The EBIT margin before special items is expected to be in the range of 26 to 27% compared to 26.3% in the same period last year.

Now, I will give the word back to Mauricio.

**Mauricio Graber**

Thanks for the update, Lise. Please turn to slide 11, where I will briefly go through the progress made on the proposed merger with Novozymes since our last update, and provide you with a piece of information regarding the dividend payment.

Since the extraordinary general meeting in March 2023, the proposed merger has been approved in the US, China, South Africa, and most recently in Brazil and Turkey. The foreign direct investments in both France and Italy have also been approved. This week, Novozymes also announced their operating model and the new executive leadership team for the future combined company.

Their operating model builds on some core principles, all very aligned with the culture and core values of Chr. Hansen. Most importantly, it is to foster a customer-centric mindset across the entire organisation through a business-led organisation supported by strong global functions, and this will ensure an agile way of working across the entire organisation. Other key principles will be to ensure effective resource allocation, and not least a sustainable and undisputed innovation leadership.

With regards to the new executive leadership team, I think Ester has set a very strong team among very good candidates from both companies. And I wish them, as a team and individually, the best of success. The completion of the combination remains subject to the satisfaction of an additional number of conditions set out in the merger plan, including certain additional regulatory approvals. The timeline for the completion of the merger is unchanged, and the closing is expected in the fourth quarter of this calendar year 2023, or the first quarter of the calendar year 2024.

Let me also mention that, consistent with the merger agreement, the Board of Directors of Chr. Hansen have decided to declare an entering dividend of 7.72 Danish kroner, or €1.04, per share, with the ex-dividend date beginning being October 13, 2023. The total dividend of €137 million is equivalent to 55% of the adjusted profit for the period September 1st 22 to August 31st 2023, and it will be paid on October 17th 2023.

To sum up, supported by strong results of the first quarter, we have throughout the year demonstrated the attractiveness of the markets we serve and the resilience of our business model. The Chr. Hansen organisation has shown robustness and agility in adapting to changing customer requirements in a very challenging environment.

While we are approaching the potential closure of the proposed merger, Chr. Hansen will remain committed to delivering strong results for the calendar year 2023, and we expect organic growth of 10 to 12%, EBIT margin before special items of 26 to 27%, and a free cashflow before special items of €190 to 230 million.

I thank you all very much for your attention, and I think Lise and I are ready to open up for Q&A.

### **Operator**

Ladies and gentlemen, at this time we will begin the question-and-answer session. Anyone who wishes to ask a question may press \* followed by 1 on the touchtone telephone. Please limit yourself to two questions only. If you wish to remove yourself from the question queue, you may press \* followed by 2. If you are using speaker equipment today, please lift the handsets before making your selections. Anyone with a question may press \* and 1 at this time. The first question from Juan Lim from BNP Paribas. Please go ahead.

### **Joan Lim**

Hello. I will just limit myself to two questions. So, one, you downgraded expectations for the FC&E market to flat to slightly declining volume growth. But FC&E in Q4 saw strong growth in your divisions. So, can you help to provide more colour on the market and how you are outgrowing the market here, please? That's my first question.

### **Mauricio Graber**

Yes, absolutely. Happy to answer that. You know, I don't think we are downgrading. We have constantly talked that the underlining market for FC&E has been in a challenging position with a difficult trend in fresh dairy. Probably cheese had the more positive momentum. And, as you can see from the report of many of our peers, it's very challenging market conditions overall in the food and beverage segment.

Now, I think in Chr. Hansen, we benefit from a few things. One is, we're a really focused organisation. We focus on our microbial and fermentation technology platforms, and we reach very specific end-use market applications. Secondly, we grow because we innovate with customers. We bring solutions to customers that help them drive productivity, help them improve yield.

And you know, there were a couple of very good examples that I mentioned during the call. One is the example of being able to bring live probiotics to the Ambient category in China. There was a dear need for innovation in China to reignite growth in the dairy category in the fermented milk segment in China. And this is probably one of the largest innovations we have introduced, live probiotics in Ambient.

When you look at our growth, as well, in health and nutrition, our ability to continue to drive innovation in probiotics and the introduction of our new probiotics for gut-brain is another example. So, I think we grow because we drive productivity, and we drive innovation in close collaboration with our customers.

**Joan Lim**

Thank you, that's helpful. Actually, just to add onto that, how is the ambient and chilled yoghurt market looking like in China?

**Mauricio Graber**

Well, it's early on. The products have just been introduced. I think it has been introduced with one of the largest advertising and promotional campaigns after COVID. So, we expect that this will be well received by consumers who like the ambient category and can now have the best documented probiotic in the world with LGG available in ambient yoghurt. But it's too early to say how the market is developing. Obviously, the initial uptake has been very positive in the press.

**Joan Lim**

Thank you. And then, my second question was in H&N. So, it looks like the strength here was driven by early timing of orders, and the lighthouses were a significant contributor. What about the core markets? Is probiotics coming back? As you said North America is still soft. Could you maybe provide a bit more colour on that, please?

**Mauricio Graber**

Yes, I wouldn't overplay the timings of orders. We mentioned it because there is a timing of order effect. In health and nutrition, we always have large customers with large orders that maybe impact that. But the truth is, health and nutrition delivered a fantastic quarter with 16% growth. Obviously, the growth in human health, in HMO, is a core element of that.

We saw very good performance in Europe. We saw very good performance in China. And you're right to point out that South Korea is soft. And in North America, I think we had a strong quarter, but we see still a challenging condition in dietary supplements in North America, particularly in the brick-and-mortar channel versus the online channel in North America continues to perform reasonably well.

**Joan Lim**

Okay, sorry, just to help me understand. So, North America was strong, but dietary supplements were soft. So, were there other sectors driving the strength, or is it just the channel element.



**Mauricio Graber**

So, probably just to close your questions, I would say HMO was strong, and obviously a large part of our HMO business is in North America today.

**Joan Lim**

Okay, that's helpful. Thank you very much. That's all I have.

**Mauricio Graber**

You're welcome.

**Operator**

The next question comes from Lars Topholm from Carnegie. Please go ahead.

**Lars Topholm**

Yes, first of all, congrats with a good quarter and then very impressive growth. A couple of questions on my side. One follow-up on the introduction of live probiotics in Ambient yoghurt. So, it's, of course, early days regarding what this means for demand for Ambient in China. But can you give some comments on what it means on your revenue per cap? Because one of your issues in the past has been that the shift of yoghurt demand in China in favour of more ambient meant you might be able to rescind your market share, but the revenue per cap went down. So, how is this affected by now being able to introduce probiotics?

And then, a second question. You recently entered into a strategic partnership with Danone. I wonder if you can put some words on what that means, and how we should think of that in terms of potentially affecting you, your growth numbers, longer term. Thanks.

**Mauricio Graber**

Thank you, Lars. Lise, I'll take both of those questions. They are largely commercially focused. So, live in Ambient, I think, Lars, you know the Chinese market quite well, and thanks for the recognition of the strong results. I think the Chr. Hansen team is extremely proud of what we have accomplished.

Listen, the chilled category, we have always said, had more potential to have the inclusion of several of our products, where you could have cultures, where you could have bioprotection, where you could have probiotics. So, our revenue per cap and the number of products we're going to introduce in chilled was larger. So, obviously, including probiotics into ambient opens another value door in the important ambient category.

Probably the most important thing, Lars, is, we know that China is one of the largest fresh dairy markets, and bringing innovation back to the Chinese market to help drive moments of consumption, to help drive interest in the category, to motivate, to see the customers invest in the category and promote the category is the most important thing. So, yes, I think this is something that adds Chr. Hansen value on products into the Ambient category.

And your second question on Danone. So, listen, we have strategic partnership with many customers. And we have had a close collaboration with Danone for many years. I think Danone formalised and made public the collaboration. I think what's important is, the collaboration shows that the customers believe in the Chr. Hansen innovation and research capabilities to drive innovation for fresh dairy, and to drive innovation for plant based.

And we are extremely proud of the relationships that we have with customers, our customer centricity. And, of course, the partnership is focused on accelerating growth, on driving growth in the key categories that bring the best of Chr. Hansen technologies ultimately to the Danone brands and to the Danone consumers.

### **Lars Topholm**

Just to follow up on the ambient. So, in ballpark figures, what proportion of your Chinese revenue is yoghurt? And within that, what's the split between chilled and Ambient, if there's a number you'll give?

### **Mauricio Graber**

Yes, I won't give that, but you remember that basically the cheese market in China is extremely small. It's just emerging. So, most of our business in food cultures and enzymes is in fresh dairy. And maybe we'll get back to you, Lars, on the split between ambient and chilled, because I don't think we have commented on that after COVID. But let me look into that, and IR will get back to you.

### **Lars Topholm**

Thank you very much, Mauricio.

### **Operator**

The next question comes from Søren Samsøe from SEB. Please go ahead.

### **Søren Samsøe**

Yes, good morning. Søren here. Just a couple of questions. You are indicating that your pricing will go up in the last part of the calendar year. What's the reason for this? Have your salesmen been

more aggressive in pricing negotiations, or is the comms getting easier, or what's the reason for that?

And then, the second question is in regard to the gross margin decline of 130 BPS in Q4. Maybe if you could quantify the FX, how much of that is coming from higher input cost and how much of that is coming from lower exchange rates? Thank you.

**Mauricio Graber**

Lise, you want to take those?

**Lise Mortensen**

Yes, I can. Søren, I don't think we are talking about the pricing going up. We're just talking about that the last four months will be pricing driven. And that's the same as saying the volumes will be modest for the last four months. We have reached kind of the inflection point of our price-up versus input cost inflation in absolute numbers, going back to your question on the margin.

So, sorry, I was just confused here. So, that's the way you should think of it in the Q4 margin. The gross margin is to a certain extent impacted by FX to the exchange of maybe minus half a percentage point, a little bit more. And the rest is that, even though our price-up has kind of caught up in absolute numbers, we're still not all the way to the margin in price-up offsetting input cost.

**Søren Samsøe**

I was just trying to find out whether... Because, normally, if you have high volume mix growth, then that would have a positive impact to the margin. So, I was just wondering if there's an actual underlying improvement. So, if there had been no input cost effect and no exchange rate effect, would you have seen an increase in the margin?

**Lise Mortensen**

Yes, I would say we would have seen a positive impact in the margin in Q4. You can look at the margin, the EBIT margin, in health and nutrition as a good sign of that. We had 14% volume growth and a good improvement in the margin for that business. So, scalability matters, which also means that, for the last four months with maybe zero volume growth, this will also mean that the margin will be going down.

**Mauricio Graber**

And maybe, Søren, just to complement, I think obviously you know the math here, but we have passed on price increases, as we have committed to compensate for the input cost inflation. So, we are able to compensate that. But there's still margin dilution, right?

And that margin dilution, I am actually quite proud that we have been able now, as you saw with the very slight EBIT margin improvement, that we were able to address that through productivity, through cost containment, through scalability, and all of that enables us to overcome what in our inflationary environment is difficult to overcome, and it's the margin dilution despite passing on the price increases.

**Søren Samsøe**

Thank you, that's helpful. And just maybe if we can squeeze in a small question on HMO, just if you can comment on the timing, when you think you can start selling this in the market. Has this changed in a mature way in the last couple of quarters? Thank you.

**Mauricio Graber**

No, I would say it has been, Søren, quite consistent with what we have said. The Chinese regulatory approval process is a complex process. I think, ultimately, let's say the end game is, we want to have our five HMOs approved in China, so we can commercialise the five mix and commercialise that, not only as a product for supplements, but also for infant formula.

So, we've now got the approval of the ingredients. We then need to have a second level of approval. And then, the customers will have to submit their approval for it to be used in infant formula. I would not expect any material revenue from HMO until the second half of 2024, 2025.

**Lise Mortensen**

For the China market.

**Mauricio Graber**

For the China market, exactly, talking specifically on China, yes.

**Søren Samsøe**

Sure, I got that. Thank you very much.

**Operator**

The next question comes from Alex Sloane from Barclays. Please go ahead.

**Alex Sloane**

Yes, thanks. Actually, maybe just to follow up there, just on HMOs. So, I think DSM, from getting the MARA approval to the NHC approval, is kind of a year process. So, your timeline would maybe suggest that could be quicker for Chr. Hansen. Maybe a comment there would be useful.

And I guess more broadly on HMOs, obviously when you bought the business, the plan was to insource production, which hasn't happened yet. Is there any kind of further development on the thinking there, or is the plan to wait for the merger with no designs to complete, to take any decision there? So, first question around HMOs.

And then, just on the second one, could you give nay update on how you're performing in India in food cultures and enzymes? I think that's been a market that you've talked about some building momentum, some growing industrialisation of that market. So, yes, any comment there would be appreciated. Thanks.

**Mauricio Graber**

Absolutely. Lise, I'll take those. Happy to comment on both. So, first of all, HMO, I think the most important thing for HMO is that, when we made that strategic bet, we said HMO would be a key ingredient in the microbiome modulation. The interest from the Chinese customers is very high. The interest that we have from customers all around the way in infant formula, and even in dietary supplements, is very high. The science continues to prove that HMOs will be important.

So, I'm pleased with the journey. You have also seen that we have seen quite some solid growth. It's been the third year in a row that HMO has delivered on the double-digit growth rate that we expected.

Now, we have a formidable competitor for sure, DSM. I think from the moment that we acquired Jennewein, I think they were already ahead in the Chinese regulatory process. Our firm belief has always been that between the MARA and then the NHC approval, we will catch up.

But the timelines that has been described is similar to what I am describing is, I think to the customers, it will probably take them about a year to get this approved for infant formula. As fortification, it will be able to use before in the market, but obviously infant formula is the largest segment, is the most important end-use application for HMO. And that will be, let's say, at least a year away.

Now, insourcing of production, that will be important. We continue on that journey. We have postponed our investment at the time of very high inflation, and we wanted to see how the market continues to develop. The performance of this year, our growth gives us confidence. I think the dialogue with our customers gives us confidence. I think the approval process in China gives us confidence. So, I think it's an area where we will continue to invest as the market develops, but I won't give any specifics around capital investments at this point in time.

On your question about India, yes, India has become a larger and more relevant market in Asia-Pacific, very different than the Chinese market. Meaning in China, you have no dairy background, and in a very short period of time, half a decade, it became one of the largest markets for fermented milk. India is very different, because there is a traditional, there is a history in staple

Indian food in dairy. And what we have seen, and we continue to see, is the acceleration of the industrialisation process.

And we believe that trend will continue. I don't think it will be as fast, for sure, as China. But I think India will be a very strong second leg of the growth in dairy for time to come, and I'm extremely proud of our team in India that has done a fantastic job in continuing to win products and launch innovation with our customers.

**Alex Sloane**

Thank you very much.

**Operator**

The next question comes from André Thormann from Danske Bank. Please go ahead.

**André Thormann**

Yes, good morning, everyone, and thanks for taking my questions. So, my first question is regarding this input cost headwind that you're currently having. Can you maybe elaborate a bit on how input costs for you guys are currently developing, and when this headwind should turn into tailwind for you? That's the first question.

The second question is in terms of the price effect for health and nutrition, which seems a bit low, also, compared to how it looked in the third quarter. So, also, if you can elaborate a bit on that. Thanks.

**Lise Mortensen**

I will take the one on input cost, André. Well, it's definitely normalising. We see the supply chains normalising. We also see energy cost, rate cost normalising. However, we still with volatile pockets, we still see some raw materials take hikes here and there. So, we are not completely out of volatility, and we are probably also now looking at a more stable and higher ongoing inflation than we've had in the past. The tailwind you are talking about, that's not something we are expecting in this calendar year.

**Mauricio Graber**

Exactly. I think, just to complement on what Lise said, we said that there will be a carry-over benefit of pricing versus input cost into 2024, and that's what we still expect.

Now, on your second question about pricing, that is true that the actual pricing at 2% for health and nutrition looks lower than expected. But André, take into consideration that there's a lot of things that go into the mix on how we ultimately communicate pricing. But with the high level of growth that we achieved, many customers also received some positive growth incentives.

And net-net, I think what you should look at is, there was a significant growth in health and nutrition, and as Lise mentioned, also a very solid expansion of the EBIT margin, which tells you that we continue to compensate on pricing, despite whether the pricing on the quarter would be less, which is more an element of the, let's say, commercial mix overall.

**André Thormann**

Thank you. Just one follow-up. So, is run rate for health and nutrition pricing more like 5%, like in Q3, or 2% as in Q4?

**Mauricio Graber**

I would take probably an average of the year-to-date as your prediction of the run rate for pricing.

**André Thormann**

Okay, thank you so much.

**Mauricio Graber**

You're welcome.

**Operator**

As a reminder, if you wish to register for a question, please press \* followed by 1. Our next question comes from Alexander Jones from Bank of America. Please go ahead.

**Alexander Jones**

Thank you. If I may, please, the first on dietary supplements. You mentioned there is a weakness in North America and South Korea. Can you talk a little bit about how you see that developing, whether there's any sign of pickup in interest or innovation pipeline from customers, or whether you expect that downturn to last for a little longer?

And then, the second question, just on the organic growth guidance range for the calendar year. I think for the last four months of the year, that implies a range of 4 to 10%, which is fairly broad, particularly given we're one and a half months into those four months. Can you give a little bit of colour on what could drive you to the top or bottom end, and what the remaining uncertainty is? Thank you.

**Mauricio Graber**

Yes, absolutely. So, on dietary supplements, I would say overall, if you see the participants in the category, I think some of the results have been with limited growth. So, I'm pretty happy with the

performance that we have, humbled of the great performance of our team, but I want to make sure that we're just conscious that the market is a challenging market.

For sure, consumers in the US and consumers in South Korea have felt the pinch point of inflation. And basically, what we see is precisely that. Many times in the past, I have said, if you commit yourself as a consumer to the probiotics as a dietary supplement category, on average, it's a dollar a day. So, some consumers that are concerned about their disposable income, higher interest rates, higher mortgages, higher cost of living. It's a category that has an element of discretionary.

Now, specific to Chr. Hansen, what I have said is, we have gone into categories that we believe have a high level of attractiveness for the end consumer. So, the categories of women health, the categories of infant. Many of those categories are consumers that have not switched out of the category, and I think has been an underlying enabler of our strong performance. I hope that gives you some colour. I think we see in the North American market we had a good performance, but we've just got to be conscious that it's a challenging operating environment out there.

And to the second question on the growth for the last four months. So, first of all, it's a little bit of a new thing for us in Chr. Hansen. We're moving from a financial year to a calendar year. It's an odd period, because it's a quarter, but it's four months, and it's not four months that would normally compare to our previous quarter. So, I think giving a guidance of 10 to 12% demonstrates the resiliency of our business model. It's consistent with our long-term guidance and long-term ambition.

And I do understand that you may view it as a wide range for the next four months, but I think it's a good way to be safe and hand over the company in a very solid position into the proposed merger with Novozymes.

On that note, I think this has been the last question. I want to thank you all for joining and for your great questions. And we look forward to seeing some of you or talking to some of you ahead during the roadshows. On behalf of Lise and myself and IR, thank you all very much.