Hello and thank you for standing by and welcome to the presentation of Chr. Hansen Interim Report and Conference Call Q3 2021 to 2022.

At this time, all participants are in a listen only mode, and there will be a presentation followed by question answer session, at which time, if you wish to ask a question, you’ll need to press 01 on your telephone. I must advise you that this conference is being recorded.

I would now like to turn the conference over to your speaker today, Chr. Hansen’s CEO, Mauricio Graber.

Mauricio Graber

Thank you. Good morning and welcome to the presentation of Chr. Hansen's Q3 results for the financial year '21-'22. I am here with our CFO, Lise Mortensen, and we will walk you through the highlights of our last quarter as well as our outlook for the full year before we open up for Q&A.

Before we move on, please take notice of the safe harbour statement.

Thank you. Let's turn to the next slide, slide three, please. In a challenging business environment - with increased geopolitical risk, high inflation and tight supply markets - Chr. Hansen continued its very solid track record in the third quarter, delivering 9% organic growth in Q3, responding to 13% Euro growth. Food cultures and enzymes delivered solid growth, while Health and Nutrition grew strongly.

However, volume growth slowed down as expected, following the extraordinary growth in the first half of the year. Year to date, organic growth was 11%. The Q3 EBIT margin before special items was 26.7%, -2.6% points below last year. The decrease was mainly driven by the negative impact from high input costs and increased cost levels from initiatives to mitigate the challenges...
in the supply chain. This was only partly offset by pricing initiatives that have started to contribute positively, as well as production efficiencies and the positive impact from currencies.

Overall, this brought the year to date EBIT margin before special items to 26.3%, one percentage point below last year. Free cash flow before acquisitions and special items amounted to €30 million in Q3 and €116 million year to date, which was down from last year due to higher taxes paid.

Let's turn to the next slide, slide four. Looking at the strategic and operational highlights of the quarter, we remained focused on commercial execution and securing supply for our customers while responding to increasing inflationary pressures. In Food Cultures and Enzymes, we continued to work with our customers on cost savings by leveraging our product portfolio on yield optimising solutions and productivity concepts such as CHY-MAX Supreme and YoFlex Premium.

We also launched new products in our fermented plant bases lighthouse in close collaboration with our industry partners and continued to advance our commercial pipeline in bioprotection. In Human Health, growth started to normalise during the third quarter according to expectations, but the team was very active, driving forward its commercial agenda by presenting the depth and breadth of our STRAIN TO SOLUTION product offering with the additions from the acquisitions at several of the industry events and also discussing with customers the current status of the [?] research.

In HMO, we continued to see strong interest from global and local infant formula companies and we are tracking very well on our plans for the year. Looking further ahead, it was positive to see that the business received new regulatory approvals for 2-FL in Australia and New Zealand and for 3-FL in [?] and Europe.

Dynamics in our agricultural business remained the same as in the first half of the year. While crop farmers have been benefiting from increased commodity prices, our customers in Animal Health have been increasingly under pressure to save costs, creating a more challenging selling environment for animal feed probiotics.

In Plant Health, I am pleased to share that we've launched our very first product with our partner UPL, a biofertiliser for fruits and vegetables in India.

Looking at the lighthouses combined, which accounted for approximately 10% of revenue, they delivered 29% organic growth in the third quarter, while the core business delivered 7% organic growth. Year to date, the growth in the lighthouses amounted to 25%, while the core business was 9%.

A key priority during the third quarter remained the implementation of price increases in close collaboration with customers to address the accelerating inflationary pressure. We have made good progress to date with the time lag between implementation and new orders and the need
to find the right balance between protecting margins and securing volume. It will likely take us a bit longer than initially expected until we fully recover the input cost increases.

I would like to emphasise that even for industry like ours, the current macroeconomic environment, especially inflationary pressure and lower purchasing power, but also customer focus on business continuity and costs out, presents a risk to short term volume, and we can see that in the underlying market developments, whether it's dairy, supplements or animal probiotics. It's a very challenging time for the industry and our customers but we believe that with our offering, specifically our productivity solutions, we are well positioned and can support our customers.

Returning to Q3 performance, please turn to the next slide, slide five. Food Cultures and Enzymes delivered 6% organic growth in Q3, leading to 7% year to date with solid growth in dairy, supported by continued strong momentum in cheese and strong growth in food and beverages. Pricing contributed 2% for the division in Q3, as we started to see the impact from the various pricing initiatives. Health and Nutrition saw strong growth in Q3 with 13% organic growth, including 1% for pricing, leading to 17% growth year to date driven by Human Health and HMO with very strong growth.

As commented earlier, the growth in Human normalised during the quarter as expected after the first half of the year with high activity levels. Despite placing of Plant Health orders in a more challenging selling environment for feed probiotics, Plant and Animal Health delivered good growth.

Please turn to slide six for the regional performance. Solid progress in developed markets continued in the third quarter, while the business environment in emerging markets remained challenged, particularly in Latin America, the Middle East and Africa, and China. EMEA delivered 10% organic growth in Q3 and 11% year to date, driven by very strong performance in Health and Nutrition, supported by strong Human Health and HMO sales. Solid growth in Food Cultures and Enzymes was supported by pricing, including euro-based pricing.

North America continued a strong track record, delivering a 10% organic growth in Q3 and 11% year to date with strong growth in Health and Nutrition. HMO delivered strong sales growth despite the general supply issues with the broader infant formula market in the US, while the activity level in Human Health normalised following a very strong second quarter. In Food Cultures and Enzymes, solid momentum in cheese continued in North America.

Growth in Latin America was impacted by order timing in Plant Health and negative impact from euro pricing related to the strengthening of the Brazilian real, leading to 1% organic growth in Q3 and 8% growth year to date.

Lastly, our region Asia Pacific grew 9% in Q3 and 10% year to date, with very strong growth in Human Health supported by new business wins in the infant and children segment and despite
the renewed COVID-19 lockdowns in China. Growth in FC&E was seen outside China, especially in India, while China declined compared to last year. While we have expected a decline in the second half for China, the lockdowns have had an additional negative impact, making it impossible to visit customers in advanced commercial projects.

Now for the financial review of the third quarter, I would like to hand over to Lise.

Lise Mortensen

Thank you, Mauricio, and welcome, everyone. Please turn to slide seven.

Our Q3 Group EBIT margin before social items came in at 26.7%, which is -2.6% below last year, driven by continuing higher input cost and increased cost levels to mitigate challenges in the supply chain, a general ramp-up of activities after COVID-19, the donation of the profit from Chr. Hansen LLC in Russia, and non-recurring costs related to an organisational change. This was partly offset by pricing and production efficiencies and positive contribution from currencies of around 1%.

Absolute EBIT before special items in Q3 amounted to €85 million, up 3% compared to last year. The increase was driven by the strong sales development in Health and Nutrition, while EBIT in Food Cultures and Enzymes was below last year, mainly due to negative impacts from higher input costs and increased cost levels to mitigate challenges in the supply chain.

Looking at year to date, EBIT before special items increased by €21 million to €234 million. The year to date EBIT margin before special items was 26.3%, compared to 27.3% the year before. The drop was again due to higher raw materials and freight costs, increased cost levels to mitigate challenges in supply chain, a general ramp-up of activities, and, as mentioned in earlier quarters, the full inclusion of HMO. And this was only partly offset by the strong sales performance, pricing initiatives and a positive contribution from currencies.

Moving into the segment margins. As already mentioned, Food Cultures and Enzymes was significantly affected by higher raw material and freight costs, as well as increased cost levels to mitigate challenges in the supply chain, and the general ramp-up of activities as well as the aforementioned donation and the non-recurring costs. This was only partly offset by pricing initiatives and a positive impact from currencies and the Q3 EBIT margin before special items came in at 28.4% compared to 33% last year. Year to date, the division reported a 29% EBIT margin before special items, compared to 31.6% the year before.

In Health and Nutrition, the Q3 EBIT margin before special items reached 23.9% compared to 22.7% last year. The positive development was due to the scalability effects from the strong sales performance, acquisition synergies and currencies that more than offset the higher input costs and activity level. The year to date EBIT margin before special items for the division reached 21.9% compared to 19% last year.
Please turn to the next slide, slide eight, for the cash flow. Free cash flow before special items stood at €116 million year to date, compared to €120 million last year, driven by lower cash flow from operating activities that offset reduced operational investing activities. The operational cash flow was below last year due to a meaningful increase in taxes paid. This, however, needs to be seen in the context of last year, which was positively impacted by a one-time impact from acquisitions.

Return on invested capital, excluding goodwill, was 23.3% compared to 23.7% last year. The decrease was driven by Food Cultures and Enzymes, which was down compared to last year, due to the negative impact from higher input costs and general ramp-up activities, while the return on invested capital in Health and Nutrition improved compared to last year due to the strong sales development.

Let’s now move on to the outlook. Please turn to the next slide, slide nine. Despite the macroeconomic challenges, we remain confident to deliver on our target for the year. With the visibility we have after the first nine months, we narrow our organic growth target from [? 00:15:35] to 8% to 10%. For Q4, we expect to see a slowdown in volumes in part due to the comparables in FC&E from Q4 [? 00:15:46], timing of orders in Health and Nutrition and a potential impact from the geopolitical situation. This is expected to be partly offset by a continued increase in pricing. However, given the delayed impact, the contribution from pricing for the full year is likely to be closer to 2%.

Moving on to profitability. The delayed impact we’ve seen from pricing combined with the continuing inflationary pressure and [? 00:16:19] to secure our supply chain had a negative impact on our EBIT margin before special items. However, at [? 00:16:28] for the quarter and 26.3% for the first nine months, we remain on course to deliver within our guidance on both EBIT margin and free cash flow before special items. This means that the EBIT margin before special items is still expected to be in the range of 26% to 27% and the free cash flow before special items is expected to be around €140 million to €170 million.

Finally, I would like to give an update on the effective tax rate [ph 00:17:01]. From this quarter onwards, our tax rate will increase from 23% towards the range of 24% to 25%. The increase is mainly driven by our acquired businesses, which have changed the geographical balance of our tax payments.

With these comments, I would like to hand back to Mauricio.

**Mauricio Graber**

Thank you, Lise. Despite the challenging business environment, Chr. Hansen grew solidly during the first nine months of our fiscal year ‘21-’22, which provides us with a strong foundation to reach our narrow updated targets for the year that Lise has just presented.
Fiscal year ‘22 remains a year of execution for Chr. Hansen. We will continue our journey in collaboration with our customers as a differentiated bioscience company focused on our microbial and fermentation platforms, while mitigating the ongoing supply chain constraints and managing our cost base tightly as a response to accelerated inflationary pressures.

Thank you all very much for your attention. Now let’s open up for Q&A.

Q&A

Operator

Thank you. And if you have a question for the speakers, please press 01. Kindly limit yourself to two questions. However, feel free to join the queue again.

Our first question comes from the line of Alex Sloane from Barclays. Please go ahead.

Alex Sloane

Yes. Hi, all. Thanks for taking the questions. Maybe just a first one. Just on the pricing outlook and bringing that down. Maybe you could give a bit more context on why it's taking longer than you expected for the pricing to come through.

And then just secondly, just in terms of the longer-term margin ambitions, over 30% reiterated, obviously, in the statement today. I guess a key driver of that is still expected to be the HMO business moving from losses to profits. Can you maybe give us an update on where you are in terms of the timeline for the in-sourcing of manufacture of HMOs in Denmark, please? Thanks.

Mauricio Graber

Thank you, Alex. I'll take part of the question and then pass it on to Lise.

I think just overall in pricings, as I stated in the call, we are managing the collaboration with customers to adjust prices and volumes. I think, overall, we started to see the benefits in Q3. I think we will see in Q4 more of prices given that the wave two of pricing will come into Q4. But obviously as stated, this is a challenging environment. Our plan is still in line to compensate all input costs with price increases, but it will take us a little bit longer. I think that's the colour I can give to that.

On HMO, I think we continue to see some of the advances in science as well as in the volumes of HMO that contributed to a strong performance in Q3. We're still developing our plans for the size and scope and timing of the in-sourcing of fermentation that we have said we will face as we get clarity on the market developments. So we haven't yet made a firm commitment to that timeline, but we have continued to develop the volume, the design for our upstream and downstream fermentation processes. Lise.
Lise Mortensen

Yes. Just to add on that, on the impact on the long-term financial ambitions. Of course, there's an improvement of the profitability of the HMO business included in our calculations and expectations. However, do remember that in the overall scheme of things, it will still be a relatively small part of the business. So, if you think about the margin expansion [? 00:21:42] by ‘25, it’s not the largest component.

And then if we talk about our long term guidance, because as you might have seen, we have added a little bit of wording around it in our announcement, we maintain the ambition to be industry-leading in profitable growth and with strong cash flow.

We do, of course, take the opportunity to state the obvious, which is that the geopolitical environment, the inflationary pressures, things that are a little bit outside of our control, we are highly sensitive to that. This situation will normalise. But we do maintain our plan. And if these things will happen, that we can adjust our prices, as Mauricio talked to. If we see a normalisation in the supply chain and the macroeconomic environment, at this point in time we don’t see any reason to abort from ambition.

Alex Sloane

That's very helpful colour. Thank you.

Operator

And the next question comes from the line of James Targett from Berenberg. Please go ahead.

James Targett

Hello. Good morning, everyone. A couple of questions. Firstly, just on, I guess, the full-year organic growth guidance. We're in July and I appreciate your comments on pricing, but it still implies a very wide range of outcomes for volumes in Q4. So I wonder if you could sort of drill down as to what exactly is giving you the extent of volume uncertainty for Q4 to give that still very wide range implied in the guidance.

And then secondly, just a bit of colour on some of the profit moving parts in Q3. You mentioned the organisational change, non-recurring costs, the Russia donation. Could you possibly size how big those were, just so we know what that contribution was in Q3? And actually just wouldn't mind an update on what that organisational change was. Thank you.

Mauricio Graber

Thank you. Thank you, James, for the questions. I think, Lise, I will mostly pass it on to you, but just commenting, general, on the Q4 guidance. James, I would say the major factor that you need
to take into consideration is the disruption that we're seeing in the supply chain. This is a highly sensitive moment where there's a lot of challenges in making sure that we can deliver on time, on full, to our customers. And that's our main focus.

So, if you look at some of the elements, you will have a high comparable for Food Cultures and Enzymes and you will have obviously, we expect that continued normalisation of the Health and Nutrition volume growth. For sure, we target to deliver a strong Q4. But I think given all the uncertainties, we keep sort of a larger range than usual in what could be the volume growth for Q4, given that we recognise that pricing will be a stronger component for the fourth quarter. Lise.

Lise Mortensen

Yes, and maybe building a little bit on what Mauricio said. Please don’t take Q4 as the picture for how we expect the future to go on. Q4 is impacted by the fact that Food Cultures and Enzymes saw a quite solid volume growth in Q4 of last year. Extraordinarily high. And the point that Mauricio was mentioning.

On the profitability, on the non-recurring items, it's about one percentage point impact on the margin in Q3.

James Targett

Thank you.

Operator

And the next question comes from the line of Charles Eden from UBS. Please go ahead.

Charles Eden

Hi. Good morning. Thanks for taking my questions. My first one just following up on James’ question. I just wanted to dig on the Russia comments and the contribution I guess to sales, but also profits in the quarter. Obviously, you donated but I’m trying to frame that EBIT contribution in the prior year to see what the sense was, the drag on the margin from that not being in your EBIT for Q3 ‘22.

And then secondly, just in the release, you talked about the timing of orders determining sort of the growth for the guidance change for this year. Can you just update us on that? Is that mainly human and just maybe some colour around the scope of timing of orders that you mentioned in the release? Thank you.

Lise Mortensen

Maybe I should start just with the EBIT comment. The donation for Russia [? 00:26:55] was included in the non-recurring items I was referring to which - a couple of components amounted
to around one percentage point in this quarter. And as earlier said, we expect the donation for this fiscal to be in the range of €1 million to €2 million in total.

**Mauricio Graber**

And just rounding off on the comments on Russia during Q3, as you know, we have made our statement very clear that we condemned the Russian invasion of Ukraine. We have continued operations only on what we consider essential foods, mainly our Food Cultures and Enzymes and Human Health probiotics. There was slightly higher shipments in Q3 as there was inventory concerns, but we expect that to normalise in Q4.

I can also report that we have continued our operations in Ukraine where dairies are up and running and providing nutritious, fresh dairy and cheese to the population. So, that is also positive.

On the timing of orders, I think there's usually timing of orders always around the end of a year or the end of a quarter. And this is a year where it's very difficult to do any timing of orders because of the supply challenges that exist, Charles. So I think we're just being a little bit conservative.

The challenges on the supply chain are both in transportation and logistics, as well as in direct and indirect materials. And you find a global supply chain that's quite challenging to operate. So, you're right, that it's largely driven by some parts of our business, but it affects not only potentially Human but also Plant Health in HMO.

**Charles Eden**

Super. Thank you.

**Operator**

And the next question comes from the line of Søren Samsøe from SEB. Please go ahead.

**Søren Samsøe**

Yes. Good morning. Søren from SEB. Two questions from my side. First of all, it seems like you have quite weak growth in Latam: -1 in Q3, which was much stronger in first half. Just if you can comment on what is actually going on and if that's something we should continue seeing in next year. Is there any negative effect from euro pricing, for example?

And then the second question is on HMO. You see several encouraging regulatory approvals in some markets. If you could elaborate on when do you think this will start to give a commercial impact to you. And also, if there's any other regulatory approvals coming up in other markets that we should take notice of. Thank you.
Mauricio Graber

Thank you. Thank you, Søren. Good morning. Lisa, I'll start a little bit with Latam, and you can complement as well. So in Latam, indeed, the volume growth was in line with the organic growth. So, we saw a weaker performance in Latam. I think I mentioned during the call that if you see the strength of our performance, Søren, it has benefited from a strong performance in the developed markets. The strength of North America I would highlight, but Europe also performing quite well versus more challenged developing markets like China and in this case Latin America.

For sure, there was a negative impact in Latin America from euro-based pricing. And that is a good thing, I believe, for you guys to see that when a currency like the Brazilian real strengthens, then we would see, let's say, a lower organic growth, even though our euro growth has been quite strong overall. So, I think that hopefully that provides some colour into Latin America.

I do expect Latin America – it has 8% growth year to date. I think Latin America, our productivity and initiatives with customers, CHY-MAX Supreme has been performing extremely well there. So, I think Latin America will continue to do well but developing markets are facing a more challenging environment.

On HMO, I would just reiterate what we have said, Søren, that we expect HMO to continue this track of growing above 20% on a year over year basis. We are in line to deliver that for this year, well on line to deliver on that for this year, and I would also see that going forward with the additional approvals that we get from some of the specifics HMO mentioned.

We have also said that from a stage gate, the approval in China will be an important approval in the future, but we cannot necessarily predict when that will happen. And I think probably '24 would be a reasonable expectation for that.

Lise, anything on this that I haven’t covered?

Lise Mortensen

Maybe just one mention that of course, we also have price [? 00:32:16] in Latam but this is more than offset by the euro-based pricing driven by the Brazilian real.

Søren Samsøe

Okay. Excellent. Thank you.

Operator

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

Yes. I also have a couple of questions. Going back to the question about implied growth in Q4. I think to reach the middle of the organic growth guidance range, you need to grow 4% / 5%. And if we assume 4% comes from price for the quarter, that means very little volume mix. So, I just wonder if you can pinpoint the areas where you see volume mix being softer in Q4?

And then, Lise, you mentioned this doesn't necessarily imply anything about next year. So, I just wonder how should we think about next year and I'm not asking for guidance here, but more which factors [? 00:33:25] Q4 that does not apply for next year?

And then a second question goes to what you're experiencing right now in terms of potential mix changes, in terms of consumers trading down. I guess the risk particularly relates to yoghurt and to dietary supplements. I just wonder if you have some sort of up to date comments on what goes on in your markets. Thank you.

Mauricio Graber

Thank you, Lars. I will start with the mix changes and then Lise, pass it on to you for Q4. So, Lars, indeed there's these concerns on what will happen with a more recessionary environment, mix changes, consumer disposable income. I would say we are less concerned about dairy or even fresh dairy because just remember that there we are quite well hedged from being a premium brand to private label to local customers or regional customers, large global customers.

I think the only market where the down trading has historically affected us is really in China where you have this cheese versus ambient [ph 00:34:45] in China is already, let's say, at a low level of performance.

Your point on mix, I think it is a good point on supplements with consumers that are, let's say, more pinched on disposable income to sustain their level of consumption of dietary supplements. That is for sure an area of concern. And I think we have also pointed out that with customers, we are seeing from a mix more demand on productivity, yields improvement, versus add-on projects like bioprotection. And even though the lighthouse has continued to grow well and we're building good pipeline, closing some of the projects on value-added products has been more challenging during this period.

Lise, on Q4.

Lise Mortensen

Yes, and thank you, Lars, for the question. It is just important to highlight that if you look at the volume growth in FC&E in Q4 of last year, it was extraordinary. And we have an unchanged ambition to outgrow the underlying markets. That is the ambition going forward, which means that a very soft volume in FC&E in Q4. That's not what we are expecting going forward.
And when it comes to Health and Nutrition, this is a business where order timing throughout the year has some impact. We have also said in previous quarters that Q4, for example, for Plant Health and HMO, will be up to negative simply because of the order timing and the sizes of the business.

And then, further normalisation of the human health business I would like to call out also. But you can remain safe in your expectations that our ambition is to outgrow the underlying markets that we are, of course, to some extent impacted by.

Lars Topholm

My question is also if part of the soft Q4 is because the underlying market growth is a little bit less. And then, of course, I fully respect you are seeing – you are growing faster than the underlying market but it’s more to put things in the right bucket. How much a softer Q4 is market-related and how much is Chr. Hansen specific? Because I would think if we had had a Q4 conversation after Q2, you would have been aiming for more than 4% / 5% organic growth. But maybe I’m wrong.

Mauricio Graber

Well, there are specific areas, Lars, like the supplement market in the US has been slowing and we can see also that in the data. You have China, that I don't think in Q4 will recover from the opening from the lockdowns, and basically, I think what I would just reiterate is our long-term financial ambitions to grow between mid to high single digits. We have consistently delivered on that. There are variations in quarters like we are expecting a slower Q4. But if you look at the context of the year overall the 8% to 10% will be, let's say, on the upper end of our long-term financial ambition. And I think it's great that even in such a challenging year, we're able to deliver that.

Lars Topholm

I don’t question that at all, Mauricio. In fact, I think it is quite convincing. My only problem is still that if part of a softer Q4 is your end markets slowing down, why wouldn’t that be an indication that - what you say - a slower exit rate out of this year means a slower entry rate into next year. I just didn't understand the comment that we couldn't make that conclusion.

Mauricio Graber

Yeah, and I think what we are basically telling you, Lars, is we have faced more challenging underlying markets in several quarters, for several years, and overall throughout the years we have been able to outgrow the markets. So I think we were transparent that it's a more challenging environment, both from a growth and from our supply chain perspective, but the specifics of making Q4 more challenging from a volume perspective is really the comparable to last year. And the specific one-offs that we have mentioned for order phasing [ph 00:39:50] in
Plant Health and HMO. So I would honestly not read too much into that, other than the clear, transparent information we're giving you.

Lars Topholm

Thank you very much, Mauricio. Thanks for answering my questions.

Operator

And the next question comes from the line of Faham Baig from Credit Suisse. Please go ahead.

Faham Baig

Good morning, guys. Could I ask two follow-ups on the macro side of your commentary as well as a separate question? So firstly, on the macro side, in dietary supplements, to what extent is the slowdown related to a very tough comparative over the last couple of years, as we've been in a health crisis? And to what extent are you actually seeing consumers exit this category? Particularly because I know you're highlighting down trading in this category, but post the UAF [ph 00:40:59] acquisition, I wouldn't expect that to be a big negative for you because of the business you've bought and the ability to supply at the lower end as well. So, that would be my question on that.

And then secondly, on the macro front, you mentioned dairy, you're less worried about. But historically, we've seen consumers down trade from higher value-added products to lower value-added products which might not have probiotic strains in the yoghurt. And correct me if I'm wrong, your probiotics sales seem like 10 to 10 negative in Q3. So why are you less worried about that side of the business?

And the final question I have is on lighthouses. Lighthouses business grew in Q2 around 12%. It stepped up pretty remarkably in Q3. I don't believe it was a tough or easy comparative in bioprotection. And at the same time, you highlight growth in Plant and HMO normalised in Q3. So I just want to understand what drove that sequential acceleration in Q3. Thank you.

Mauricio Graber

On the lighthouses, I think we did not say that the growth in HMO normalised. Actually HMO had a strong growth in Q3 and that contributed obviously strongly to the lighthouses. We also saw that fermented beverages had a strong performance. So overall, the lighthouses performed well in Q3, as we just mentioned, despite the challenges of value - of this being, let's say, in some cases, value on [ph 00:43:01]. So I'm happy to see that customers are valuing the innovation and that we continue to see good tracking in the lighthouses as, let's say, accelerated growth initiatives.
Your question on dairy is a fair one and when I said I'm not that concerned, there's obviously a level of concern. We would rather see customers up trading and higher disposable income. But basically what we have seen through other crises is that our dairy business has not been that affected by down trading. Remember that you are correct that in some of the brands that would have probiotics, something is an upselling opportunity, but you should also remember that in some of the global, let's say, markets, and I mean excluding there China, if you have sometimes a lower price point fresh dairy, for example, it may have more of Chr. Hansen's solutions. For example, to have less dairy protein in a very strong culture that still provides a very good texture and a very good flavour for the finished product.

So, our ability to support great tasting, fresh dairy across the different price points holds very true. And that's why I said it's not that I'm not worried, I just said I'm less worried about the down trading in dairy.

Was there any other part of the question we didn’t –

**Lise Mortensen**

Dietary supplements.

**Mauricio Graber**

Yeah, I think good question on dietary supplements. It is true that, as mentioned in the call, we have a larger breadth and depth of dietary supplements and a larger reach through the different channels - omnichannel, online, traditional retail, etc. And we should be better diversified.

But I think the question - to what extent will consumers either continue to access the category or remain in the category - I think it's safe to think that it will be more challenging under more economic conditions.

**Faham Baig**

Thanks, Mauricio.

**Operator**

And the next question comes from the line of Andre Thormann from Danske Bank. Please go ahead.

**Andre Thormann**

Thanks a lot. And hello, everyone. So, my first question is in terms of order timing in Health and Nutrition. I wonder whether you can help us with quantifying on how much of the Q3 growth in Health and Nutrition came from order timing. I think you did quantify it in Q1, so I wonder whether you could help us with that again.
And then the second thing is a follow up on the down trading theme that you have been talking about. Could you maybe elaborate a bit on how this risk affects your ability to keep on raising prices on especially dietary supplements. Thanks.

Mauricio Graber

Thank you, Andre. So, Lise, I’m not sure if you want to talk about the timing of orders, but in Q1 it was something that’s more specifically there’s nothing in Q3 to sort of quantify, right?

Lise Mortensen

Yeah, and it’s important for our Health and Nutrition business really to say, look at it on a full year basis because we do have these fluctuations driven by order timing.

Mauricio Graber

Then on the second part of your question about prices. So, I would say price negotiations with customers are always challenging and we’ve got to take them in the point of long-term, let’s say, rewarding negotiations with customers. I don’t think the element of down trading affects the negotiations with customers because we’re passing price increases to all customers based on the input costs that we have and that we are seeing. And that basically applies across all the customer based on their portfolio.

So, obviously, whether you see a down trading in the market, because customers will have a price increase across all segments and across all categories. And if I want to provide a little bit more light on pricing, I would say customers have been receptive to price increases. The negotiations are not easy, but were concluded successfully. And then customers as they go to market have separate several tools on how they are going to absorb those price increases with packaging and volume and sizes and the whole mix that they have. So, it’s been a journey where our commercial organisation has spent a lot of diligent time with customers to pass the price increases across all business areas and across all geographies.

Andre Thormann

Thanks. Can I just come with one follow-up? Just on pricing. I mean, are you talking about 2% instead of 2% to 3%? Just to be sure, in which business segment is it that you have seen a delay here? Has that been more in Health and Nutrition or Food Cultures and Enzymes? Thanks.

Lise Mortensen

I would say it’s both cases, but it is Food Cultures and Enzymes that’s more impacted by the input cost inflation. And if you think about the nature of our Health and Nutrition business the order lead times are quite long, which in itself has an in-built delay to a price up [ph 00:49:02].
Andre Thormann

Okay. Great. Thanks a lot.

Operator

The next question comes from the line of Rickard Anderkrans from Handelsbanken. Please go ahead.

Rickard Anderkrans

All right. Thank you for taking my questions. Rickard Anderkrans, Handelsbanken here. So, first one on China. Can you provide any quantification of the negative impact from China here in the quarter? And perhaps also sort of a current trading or at least an outlook on your assumptions into Q4?

And finally, you also mentioned in the report looking at US sort of traditional retail channels are slowing down a bit. Can you talk a little bit about that dynamic and if there's anything you can do to sort of mitigate or offset that slowdown in the traditional US retail channels? Thank you.

Mauricio Graber

Sure. So, for China, we have said the year all along that we expect that even though if the overall fresh dairy market in China declined that we would be flat to slightly positive. I think with the lockdowns, we are seeing that we will be slightly negative for the year. So nothing significantly. I would say that's a material change other than China turning slightly more negative to our expectations because of the lockdowns. And as I mentioned before in the call, the lockdowns have really affected two things. One is the consumption because fresh dairy is consumed usually on the go or also for gifting. And the other thing that it has affected; it has affected our ability to push the pipeline in closed projects as we did not see customers during eight to 10 weeks between the phases of those lockdowns.

On the US retail and the traditional channel, I would just say that other than cheese, where we have a play in food service, most of our products would go to retail. Obviously, on the dietary supplements, we now have a larger presence online, but there's nothing - there's not a lot of tools that we have when retail sees a slowdown. I think it's logical to see that we will see a slowdown as well in our volumes. And that's why we have been a little bit mentioning the more challenging operating environment.

Rickard Anderkrans

Thank you. That’s super helpful. Thank you.
Operator

And the next question comes from the line of Georgina Fraser from Goldman Sachs. Please go ahead.

Georgina Fraser

Hi, there. Hi, Lise. Hi, Mauricio. Thanks for taking my question. So, you are facing your own kind of supply chain challenges at the moment. I was just wondering if any of your customers are starting to worry about the ability to secure raw materials in light of risks around Russian gas flow into Europe. And if you could remind us if you have any particular exposure to natural gas in your European operations. Thanks.

Mauricio Graber

Thank you, Georgina. Good morning to you. I’ll talk about the supply chain challenges and Lise, I’ll pass to you if you want to talk about gas.

So, Georgina, as a focused microbial and fermentation technology platform company, I think our supply chain is relatively narrow. And we still face challenges. So, obviously our customers that have a much broader supply chain, they are facing challenges. Probably our challenges are a fraction of the overall challenges if you are in a business to consumer environment. So, obviously what we try to do is to identify risk, flag risk, have alternative suppliers, have alternative sources of suppliers. What you end up finding is that in several cases in this economy that was highly globalised, even if you have different suppliers, they may go back one, two, or three steps down the supply chain to the original supplier of the original same material that might be in shortfall due to the supply challenges that we are facing. So that's the overall challenge with the, let's say, fragile supply chain as it relates today.

Lise, do you want to cover natural gas?

Lise Mortensen

Yeah, thank you, Georgina. Gas is not a large part of our energy consumption. However, our fermentation is dependent on gas in Europe, in Denmark and in Germany. At this point in time, we still see ourselves on the list of critical food suppliers. So, not as much as risk as other industries might be, but of course we've taken our mitigating actions so that we will be able to operate should we lose our access to gas. And it would be a less green solution, but that's how it is.

Georgina Fraser

Okay. That’s very helpful. Thanks.
Lise Mortensen

I think we have time for one more question.

Operator

We have a follow-up from Søren Samsøe from SEB. Please go ahead.

Søren Samsøe

Yes. Just a question regarding the margin. Maybe you can quantify the negative effect on the margin from higher logistics costs and ramp-up costs that you expect in Q4. And then just if you could tell us in which quarter we will stop seeing ramp-up costs being a headwind year over year on the margin. Thank you.

Lise Mortensen

I think the way to put it, Søren, is that it is the input cost inflation and whatever extra costs we carry to kind of safeguard our supply chain. That's the largest part of our draw down on the margin. The ramp-up of activity should normalise when we go into next year.

Mauricio Graber

And we expect pricing in Q4 to have a larger component as it relates to the margin.

Lise Mortensen

Yes, when you think about EBIT margin in Q4, the pricing impact will be more on the positive.

Søren Samsøe

And that I guess will be mostly in Food Cultures and Enzymes and not so much Health and Nutrition.

Lise Mortensen

Both businesses, but we are pricing more in Food Cultures and Enzymes, you're right.

Søren Samsøe

Okay. Thank you.
Mauricio Graber

Thank you, Søren. On that note, this concludes today's conference call and Q&A session. Thank you all for joining this morning, and we very much look forward to continuing the dialogue with you in person or through the virtual meetings over the next coming weeks. Thank you, all.

Operator

This concludes our conference call. Thank you all for attending. You may now disconnect your lines.