Interview partner: Mirko A. Cortese Date: 16 December 2019 at 12 noon Place: Practice for complementary medicine and therapy, Wolhusen

I: for interviewers

B: for respondent

I: Roughly summarized, what is your opinion on dietary supplements?

B: Since I work with dietary supplements, the opinion is obviously high. It would be funny if I said that I don't think much of it. I know of course that many studies show in a lot of different directions, but I go more with the experience of things and I think a lot of supplements. I could no longer imagine working without supplements in my practice. For us it is unthinkable to leave them out and also the success we have with them speaks for itself.

I: We will come back to this later. Again, a similar question: In your personal opinion, do you think that supplementation is an important factor in a dancer's diet?

B: First of all, something that might relate even more to the first question. Dietary supplements are foods, concentrated, in pharmaceutical form i.e. a complex of micronutrients that are necessary to support the correct functioning of the metabolic processes associated with life. This means that you need to get certain micronutrients in order for your life to function properly.

Of course, you can always eat healthy or bad food in normal life. In general, for a person who practices sports, a healthy diet is of course fundamental. You must not gain weight, especially as a dancer and we, for example, do not look at dancing any differently than a sport athlete. For us it doesn't matter if you run a marathon or dance, it is just different functionalities but it's still overstraining your body for several hours a week etc. in the same way.

Every person who follows a disorderly diet shows dysfunctions of any kind. If one practices more or less intensive physical activity, there is a potential need for it. The more you need, the more you have to intake, just like driving a car. There are medical and nutritional advances. In that sense, I can confirm that a dancer is doing a very, very intense sport. You have to imagine if you train so many hours a day, the normal diet you can no longer supply all the nutrients you need. 00:04:32

For us, it plays just as important a role in dancing as it does for someone else.

I: Do you know of any case studies where supplementation had a significant effect on training and the results achieved?

B: Do you mean written studies or patients?

I: Patients.

B: I can give you three concrete examples; Lisa Stöckli, second fastest 800 meter runner, Sven Schurtenberger, swinger and Stifi Reichmuth, wrestler third at the World Championship in 2019 and Olympic participant in Tokyo next year. 00:05:39

We could compare all 3 of them before they came to us without supplementation. Lisa Stöckli for example has run two best times in only one year after supplementing. She didn't have the energy to optimize her training and of course if you don't have enough energy in training you won't be able to increase your performance 100% and therefore just stay where you are. You can function at this certain level but as soon as you try to go one step further up you don't have the power to increase your performance. This is the one part, what is also very important for us is the recovery part. That means that you can do your healing process in order to be fit again for the next training session the day after.

With a martial artist such as Stifi Reichmuth or Sven Schurtenberger, we have simply seen that some of the trainings are very intense and that they have many wounds the next day from the blows they take. There we clearly saw when we gave Gl3 in the evening for example, which is an amino acid concentrate, they could start the next day almost without any pain back into training. This is of course an essential factor in order to give full power into every following training session.

And that is also what we can say that we experience one-to-one in practice. I could list many more, but these are certainly three good examples that also have a name.

I also talked to Dr. Moretto from Italy and asked him if he has any relation to dancing and Syform, the supplements company I work with, supports the Italian dancer Vanessa Gherbavaz from the Bolshoi Ballet. She works with such products as well, which might be interesting for you.

Studies are not so important for me, because it is always very much a matter of interpretation. Sometimes it's just that someone is a fan of something, then it turns out well, if he's not a fan he's very critical, it always varies. We personally try things out directly with our athletes and from that I can clearly tell what is or is not.

I: Now more specifically, what kind of supplements would you recommend for dancers or performers?

B: I ask myself the question what does a dancer need? In general, it is necessary to check a balanced diet, which is rich in various nutrients. For me it is very important that the diet is adapted to what you do. You have a lot of jumps, a lot of explosiveness and also endurance. This means that you will also have a problem if you have too little concentration, suddenly a mistake can happen or you make mistakes in the choreographies etc. due to tiredness. For us sport injuries are always the number one. Apart from the fact that we want to increase performance, we also want to reduce the risk of injury. In dance I see a great wear and tear of joints, tendons and ligaments and I find it fundamental that exactly these are nourished properly.

I would specifically recommend e.g. ARTICOL, which is a magnesium calcium manganese mixture, which is especially good for joints and connective tissue. It is also to ensure elasticity in the joints and to reduce the load on the bones.

Then general anti-inflammatory drugs such as organic curcuma. Because by all the stress the danger of inflammation always arises. For dancers especially for example knees, ankles, shins, hips etc. are affected and if you take substances that already compensate for these inflammations you can prevent them.

Then for all the explosives, CITROGEN and CITROFOS (you can see what they contain) Proteins I also find important. This is mainly for the whole supporting shell of the muscle tissue and is also a muscle care. But this only makes sense if you take it immediately after training. One hour later it is no longer of any use, you can also leave it straight. "The nutrition can be sufficient, but also from a practical point of view, integration can solve situations.

Then you could still take certain COLLAGENE.

Then REISPRINT - COMPETITIONS also for example from Syform. These are salt supporters, because you burn, sweat and breathe a lot and therefore minerals and salt are lost and to replace them is a very important point. In the REISSPRINT there are also substances that

awaken the nervous system, i.e. the vegetative one, i.e. one has a higher mental concentration and therefore fewer mistakes are made. I would recommend these drinks for very intensive training sessions.

Then of course you can improve by taking VITAMIN C, MULTIVITAIME, MAGNESIUM or things that activate the mitochondria in the cells. Mitochondria are like energy suppliers and energy stores and if you can additionally nourish them that would be like the icing on top This is how I would put something together for a dancer.

I: I have a quick question, what do you think about vitamin D, since we spend a lot of time in the studio and therefore don't receive much sunlight?

B: Of course you could take it additionally. For example London where you have less sunlight than in the south, plus you're inside a lot of the times. You potentially leave home in the morning when it's dark and come back in the evening when it's dark again. There, one can surely add it. But the reason why many multivitamins contain only little vitamin D3 is because too much of it is also not good either. Just like too much of e.g. vitamin A or E, you should not take too much of it because it can suddenly become counterproductive.

I: We will come back to this later. Actually you have already answered the next question. It is about whether you would distinguish between other sports athletes and dancers with the recommendation of the supplements?

B: I would of course give other supplements. A swinger needs different substances than a dancer for example. However, with a professional dancer I would work with the composition I gave before.

I: How important is the regular intake of the supplements?

B: It generally takes some time first where you need to take the supplements in order for the body to build up something. This is the first point. Sometimes I also tell people that they can skip the supplements during the holidays to get some rest from all of this but I would make it depend on the intensity of your situation. If you have intensive times I would certainly take the dosages that are needed, but you can also reduce it a bit in more relaxed times. Otherwise in normal training times I would take the supplements continuously and not make big variations.

I: What do you think about supplements and placebo effect? Do you think that could have an effect?

B: I have to say placebo is always and everywhere a topic. It is known, for example, that red tablets work better for pain relief than blue ones. These are things that are certainly relevant. I think that this can be at the beginning, i.e. when you do a study and you tell somebody look, this is something that is good for you and this can then have a short term placebo effect. But I don't believe in this kind of effect on a long-term basis, so for example on someone taking it for already 6 months. That's when you know if it's going to work or if you're going to have a breakdown. The belief may last for two weeks but at some point it will be over. So I personally don't experience this placebo effect over a long period of time but as I said placebo is everywhere and always.

I: Now we come to what the important things to look out for are in terms of supplementation? What could be possible risks associated with supplementation or even possible overdose etc.

B: Of course it always depends on what you are taking. For example, what you might get is a higher percentage of body fat, that can be a side effect, it doesn't always have to be stomach ache, diarrhoea or something like that. That is certainly a point. Kidney or liver overload can also occur if you take bad products. I think bioavailability is very important. That means if you have a product, which is of high quality and has a good bioavailability you have less problems in general. Also if you would overdose, in contrast to if you have a bad product where you might have ingredients that are questionable. That is why the companies are very important. Looking out for companies that are perhaps international and also look after top athletes. Where of course doping stories are not involved and they are verified, therefore you know that they must have a good value.

It's not always the case that everything that is written on the bottle is exactly contained in the supplement.

It can of course also lead to disorders such as stomach aches, digestive problems or even diarrhoea. But I must honestly say that we never had such problems here before. If you know how to use it and maybe do a test on your hair or blood, it is very difficult to overdose. But of course you could, although you can do that with anything, even if you eat too much chocolate you will get a stomach ache. It is not like it's only theme with dietary supplementing.

You can of course also under dose. You would be taking supplements but not enough and therefore not have an effect at all, which is the other side.

If you take bad supplements you might also get a problem with heavy metals. You often see this with Omega 3, if you have bad quality supplements there, they may contain heavy metals and if you take a lot of them you would have a metal overload.

That's why these things have to be checked all the time. It is also important that you go to professionals and get the products there and not just through the internet and have no idea what you are ordering.

I: Well, we are already at the end, do you have anything else you would like to add or did we leave out something important?

B: What I want to add is that supplements are not magic powders. It's actually food in a clear, distinct format related to what you're doing. It works the same way as with normal food, you can eat badly as well as well, you can eat good things as well as bad things, and again it depends on each individual how they want to handle these things.

I: I would quickly like to come back to the topic of gaining weight, which is of course very critical, especially in dance. Could you tell us a little bit more about it?

B: Yes, this can be the case if supplements are dosed incorrectly. However, if the dosage is correctly adjusted, this cannot happen. Also, all the supplements I recommended before are not really fat forming. But if you take the wrong protein with a high percentage of carbohydrates, it is quite possible that you will gain weight instead of keeping it. Or you get too much muscle mass through too much protein and therefore gain weight again or you get less mobility through the muscle mass etc.

As said before, it is important that someone who has experience with these products puts it together. Sometimes there is simply the danger of getting into the very cheap and poor quality products. Basically, you must always pay attention to what exactly you are taking. One more thing, that just came to my mind about toxicity symptoms. This can be seen especially with vitamin A preparations. There it could be the case of becoming toxic. One can

get lip inflammations, bone and joint complaints. But it is important to know that this is a vitamin, you would have to get prescribed at higher doses.

You can get hypervitaminosis, i.e. that you take too many vitamins, especially the fat-soluble ones like A D E and K. However, if you put together a supplement plan with someone who has the knowledge, all this should not happen.