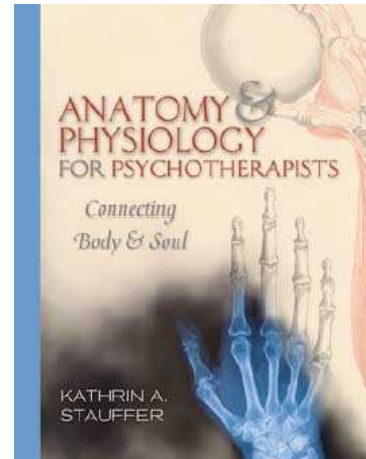


## A Holistic View of Basic Metabolism

*This is, as best as I can remember, a transcript of the talk I gave at the launch of my book, 'Anatomy & Physiology for Psychotherapists: Connecting Body & Soul'. The talk was interrupted at all the most opportune moments by the most apt and interesting questions from those present. I have tried to include the answers I gave in the body of the talk. The questions generally seemed to lead me on in my topic and contributed very greatly to the interest of it to the audience. I would like to thank those who asked them.*

My book grew out of a course in anatomy and physiology that I taught to students of body psychotherapy. From the beginning, my problem was that these students were rather resistant to learning such a dry academic subject, and I had to try and make it relevant to their real interest. The way I did this was to keep drawing parallels between what happens on a physical level and what happens on a psychological level. And I have also tried to do this in my book. So in order to give you a taste of what the book is like, I have decided to pick out a little subject and talk about how I have drawn such a parallel.



The subject I have chosen is what I call basic metabolism, that is, the transformation of the different constituent parts that make up a living human body into each other. On a physical level, the science that deals with these processes is biochemistry, which used to be my own subject: the chemistry of the molecules that occur in living organisms. Now biochemistry has a rather evil reputation, and I have heard a student compare learning biochemistry to trying to memorise the telephone book: all detail and no obvious connection or meaning. In that sense, the subject was an extra hard challenge for me in putting together my course, a challenge to try and simplify so that we wouldn't get lost in the detail, and to find something meaningful to say about it all. So here's what I have come up with:

The simplest statement I can make about the molecules in living organisms, that will allow me to draw some meaningful conclusions, is to classify them into two groups. I will call these two groups small molecules and large molecules. I can make some observations about these two classes of molecules as follows. First, if I were to compile a list of all the different small molecules in my body, I would have a list of perhaps a hundred or so – a finite number. Second, all the small molecules in my body are the same as in yours, or in that of any animal, plant or other organism. They are what we have in common with all living beings. On the other hand, if I were to compile a list of all the different large molecules in my body, I would have some billions or trillions of different ones – a huge number. And they would be different from the large molecules in your body, or in any other organism. It is individuality

and uniqueness that resides in the large molecules, whereas commonality is in the small molecules. The third point about large and small molecules is that every organism makes its own large molecules, and it makes them by stringing together small molecules. In other words, some small molecules are the building blocks for the large molecules.

Each organism has not only the ability to make all its own large molecules but also the ability to dismantle them again if necessary, so that at any given time each part of the body will contain just the right amount of just the right kinds of large molecules. This is where the evil reputation of biochemistry comes in: the totality of all the chemical processes that contribute to all this making and dismantling of large molecules constitute a veritable chemical pandemonium, because everything is happening at the same time, all the time, and it is typical of living beings that everything is in constant flow and forever changing, even if only a little.

I want to stop for a moment and try to draw some parallels. I can recognise the elements that form what we could call common human ground: they might be ego defenses, or character structures, or complexes, or other elements of human souls that allow us to understand and resonate with another person's experience. Because we have these things in common, we can do psychotherapy. But we also know that when we take all these elements together in one single person, we end up with a completely unique and individual person who is like no other. I can also recognise the constant change in what constitutes my sense of myself, which nevertheless is slow enough and has enough coherence to allow for a feeling of constancy, for a feeling that I am always the same person.

So now I want to go a step further and look at where the material for building new molecules comes from. The main source of it is of course food. But if you think in terms of large and small molecules, you can immediately see that there is a problem: what I am eating, the egg I have for breakfast or the tomato I have for lunch, have their own large molecules, and they are the wrong ones for me. Moreover, my body will not allow them inside itself: when I eat a tomato, I do not end up with a tomato inside my body. If that were to ever happen, I would have a tomato sitting there not being able to be processed at all. It would be quite useless to me, because its molecules are all wrong for me. But luckily I have a digestive system, and what it does is to take the tomato's large molecules and chop them up and break them down into their building block small molecules. At the point where the molecules have become small, they are indistinguishable from my own, because they are precisely what the tomato and I have in common, and they can then be assimilated into my body, which in turn can use them to build my own large molecules. It is in this way that the tomato can be transformed into me.

In addition, the digestive system has the ability to make a judgement whether any given small molecule is useful for me at any given moment. It will only take up these molecules into my bloodstream and ignore all the others. We can thus say that an ability to discriminate between 'good' and 'bad' is built into the digestive system. For this reason I have called the chapter on the digestive system in my book 'the difference between good and bad'. Note that the digestive system ignores the 'bad'. Unlike most of us on a conscious level, it does not get angry or upset with bad things; it just does not engage with them. I find that a most desirable quality and hope that as I age, I will increasingly be able to do the same!

The point that I really want to emphasise here is that the process of taking in food - and I believe that there is a functional identity between taking in physical food and psychological food – starts with the destruction of the food. This is, in my experience, also true if we think about the 'food' that is psychotherapy: no matter how finely attuned we are to our clients, no matter how healthy and tasty the 'food' is that we offer them and that we would so like them to take in and assimilate, it will never happen. Clients always make what they make of therapy, take in what they take in and not what I want them to take in. It is not possible in any other way. In fact when the process of destroying something is blocked, we end up with an experience that cannot be digested and that stays around unprocessed, rather like the tomato sitting inside me would be. One psychological term for this would be an introject.

There can be various reasons for this process of destruction and also the process of discrimination to not work properly. Some people never quite get a chance to learn it and to grow a properly matured digestive system, either physically or psychologically or both. But most often we also find that the process is blocked. Poverty is a possibility in this case: if food is scarce enough, you stop looking at it and picking out good bits, you just try and take it all in. Alternatively an experience, or a piece of emotional food, can seem too precious to be destroyed and must be preserved forever.

I do not know whether this process has been described before in these terms. I have not found it anywhere and would like to think I have come up with it. I call it the Visceral Ego, in recognition of the fact that it is not obviously inborn but acquired over a lifetime. This parallels again with the physiology: the digestive system of an infant is not able to process many foods that an adult digestive system can process, and it needs to mature first. I would, on the whole, assume that every individual has basically got the capacity for learning this, so that in therapy we can try and develop something that is potentially there – rather than assuming that only some individuals can learn this at all and some just will not. But I have no evidence to support this belief, it just reflects my personal worldview.

It remains to be added that there is an observable parallel between digesting physical food and digesting psychological food: body psychotherapists all know that when a client is processing or digesting something that has happened, their intestinal peristalsis will be activated and we can hear stomach gurgles. Clearly for my gut, digesting experience and digesting food are the same thing, and it will behave accordingly. I wonder whether this conflation happens at the level of the brain, which seems to not be very good in differentiating whether something is actually happening in the body or just in its own map of the body.

And of course the \$64,000 question would be: how can we teach clients to grow more of a visceral ego in psychotherapy? I don't know that I have any very good answers. Sometimes offering a lot of very finely-attuned food helps over time. Sometimes trying to unravel the things that prevent it happening helps. Usually a mixture of both is necessary. I suspect that safety will be a key – we know that a person's digestive system does not have much of a chance of working properly if the person is not feeling safe, and safety in this respect will also include a secure attachment to the therapist.

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