



Support • Education • Inspiration The Newsletter of the Ananda Yoga^{*} Teachers Association • Vol. 13 No. 3 • Fall/Winter 2008/9

Core Curriculum

Part 1 of a 2-Part Series

by Gyander McCord

Unless you've been living in a cave for some years, you've heard yoga teachers telling their students, "Engage your core." This didn't happen until recently. My guess is that it arose from the popularity of Pilates classes (where "the core" is a key focus)—many yoga teachers simply decided to "import" into yoga some Pilates principles.



Gyandev McCord, Director of Ananda Yoga

Although Pilates practice provides many benefits, its goals are quite dif-

ferent from those of classical hatha yoga. So it seems to me that many yoga teachers could benefit from a closer look at the instruction, "Engage your core," as it applies to Hatha Yoga. That's why I've dedicated most of this issue of *Awake & Ready!*—and the next—to an exploration of the core: what it is, what role it plays in daily life, and what role it might have in Ananda Yoga.

To give you both physical and energy-based perspectives, I interviewed a panel of four Ananda Yoga teachers with professional experience in working with the body. I asked them to limit the scope of their answers to people with healthy bodies, since injuries bring up many complications. In Part 1 of this article, you'll hear from:

- Barbara Bingham—Physical Therapist and A&P teacher in AYTT
- Alan Williams—Osteopathic Physician and Pilates teacher

Part 2 will highlight the thoughts of our other two authorities. I think you'll enjoy what all of them have to say. I've found this entire investigation *very* stimulating—right down to my core.

Start with a Yogic Perspective

From an Ananda Yoga perspective, the true "core" is the astral spine. As Swami Kriyananda has often said, "that's where the real spiritual work takes place." And as you know, working with the body's subtle energy, especially the energy of the astral spine, is what Ananda Yoga is about.

Still, the physical core is important—not only for physical health and function, but also because a straighter physical spine leads to a freer flow of energy in the astral spine. As Paramhansa Yogananda often said, "A bent spine is the energy of self-realization." This correlation is central to the higher levels of asana practice, pranayama and meditation, and below you'll read how this comes up in reference to the (physical) core.

In terms of physical anatomy, there seems to be no such thing as *the* core; different people have different ideas as to what it is. As you'll see, even the members of our panel make different choices of emphasis and terminology concerning the core. But I think all will become clear to you as they explain how they view the role of the core in everyday life, as well as in asana practice. There was a lot agreement, yet each person had some unique insights to share. Now let's move through each panel member's discussion of the core, one person at a time.

Barbara on the Role of the Core

Gyandev: What is the core?"

Barbara: In general terms, it could be considered the trunk, that is, the pelvis and torso considered as a unit. The body can be loosely divided into two parts: the trunk and the limbs. I begin my thinking of the core of the

IN THIS ISSUE

Core Curriculum by Gyandev McCord1
Ananda Yoga on the Road, by Gyandev McCord4
Spreading Inner Peace, Card by Card, by Teri Pancoast6
Ayurveda & Yoga Retreat in India8
AYTT Grads on the Yoga Alliance Board of Directors, by Gyandev McCord10
Ananda Yoga for Multiple Sclerosis, by Gyandev McCord11
Level 2 Trainings in 200912
AYTA Contacts 12

©2008 Ananda Church of Self-Realization • All Rights Reserved

body as the spinal column. (Remember, the neck and head are part of this as well.) The spinal column is firmly attached to the pelvis, so the movements of one structure affect the other. The muscles attached to the spinal column, pelvis, and ribs together form the trunk. The spine and trunk are built to move, but they're also built to be stable.

When people speak of the core, they usually mean the "inner core" muscles of the trunk: diaphragm, pelvic floor, transverse abdominis and multifidus (*see illustrations, pages 2–3, 9*). This inner core is concerned with stability, and its muscles work in harmony to create this stability. The other muscles are more concerned with move-



Barbara Bingham is a Physical Therapist, Ananda Yoga teacher, and Ananda minister. She teaches most of the Anatomy & Physiology in AYTT. She has produced three videos: Yoga for Menopause, Sadhana, and The Energization Exercises.

ment, although it's not always possible to strictly categorize a trunk muscle as being concerned with *only* stability or *only* movement. When all the muscles of the trunk work together harmoniously, we have good posture while static (meditating) or moving (everyday activities as well as asana practice).

How would you put this in simplest terms?

I think in terms of the spine and trunk, not "the core." I focus on awareness of trunk posture and stability. From a functional standpoint, I include both pelvic stability and scapular stability in my vision of trunk stability.

I essentially look to enhance posture, which has physical *and* spiritual benefits. Drawing oneself up through the crown of the head helps to level the pelvis and lengthen the spine, reducing any excessive curvatures in the spine, reducing strain and compression of the joints

and the bones. This allows for improved movement patterns in the limbs and improved energy flow in the astral spine. We want to learn to be aware of our posture, improve it when needed, and increase our endurance and strength to

maintain our optimal posture during all

The Role of the Pelvis

our activities.

You mentioned pelvic stability. What is that, and where does it come from?

Pelvic stability comes from the muscles of the front of the trunk working harmo-

niously with the muscles of the back of the trunk. For this discussion, it refers mostly to control of pelvic retroversion (tucking) and anteversion (tipping forward), al-though it can also mean side-to-side stability. Our general goal is to maintain a neutral spine during activity (including many asanas) to prevent excessive lumbar flexion or extension. Excessive or uncontrolled flexion or extension can create stress or compression in the spine, which can lead to pain.

Spinal Stability

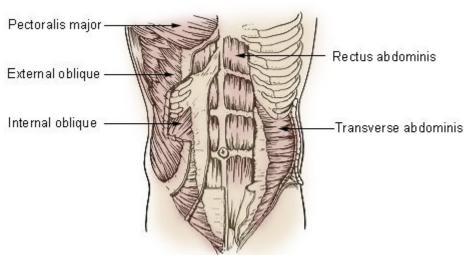
How do we benefit from emphasizing spinal stability?

Having the awareness and the strength to maintain spinal stability enhances the efficiency and effectiveness of all our bodily movements. If we're going to move our arms or legs in any direction, it's always more efficient to work off a stable spine. Just imagine moving your arms around when the spine is wobbling all over the place. Some of the strength of the limbs is literally lost when that happens.

This carries over into asana practice. The more spinal awareness and stability we have, the more we can progress—and the healthier our progress—in flexibility and strength of hips, shoulders, and so on.

Does "spinal stability" also entail a neutral spine?

We want spinal stability in *every* position, even when we're deliberately bending the spine, as in a backward bend. Often we'll say, "Straighten your spine," which is okay if students know that we mean "optimize your natural curves." Having a neutral spine, and the strength to maintain it, both protects the spine and leads to optimal efficiency of limb function. That's when we'll recruit the right muscles to do our work. If your spine is wobbling or out of alignment, you'll recruit the wrong muscles to compensate, and you're likely to strain those muscles because you're asking them to do things they're not designed to



Some Anterior Muscles of the Trunk

do. This negatively impacts the alignment of all our joints; it also can cause wear and tear on the joint surfaces.

The goal isn't to constantly have a straight spine; the goal is an uplifted, stable, and supple spine at all times. The position of the pelvis is very key in our goal of good posture, core strength, and spinal or trunk stability. The harmonized efforts of all the muscles on the front and back of the trunk helps to position the pelvis properly, and then stabilize and protect the spine.

So you take a "from the inside out" approach.

Yes, that's Ananda Yoga. It's also my training as a physical therapist, although PT training was purely on a physical level: head and trunk was control was a basic goal before optimal limb strength and function could be expected.

That's also how we develop neurologically from birth: As infants, we first gain head control, then trunk awareness and control. We then gain control over our shoulders and hands. As we gain hip and leg strength, we crawl and then finally we walk.

And in a more subtle way, it works the same when healthy adults learn new activities such as yoga. We need a sense of stability in the spine in order to move our legs and arms effectively, and feel secure and be safe in our practice. It's good to practice keeping a neutral, stable spine while we shift our weight in various directions. This can be done in Tadasana or "sitting Tadasana."

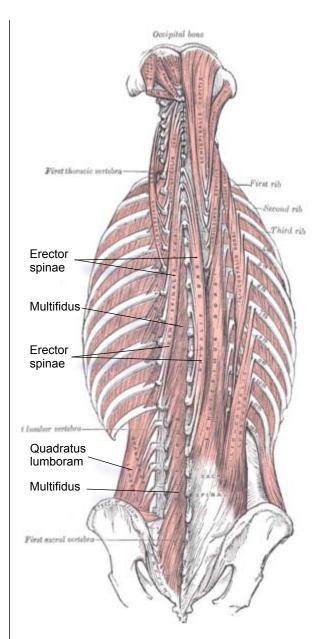
It's also true at the spiritual level: Learning to be gently aware of our spine physically—and then inwardly, on an energy level—helps us to be more balanced and stable. Both physically and spiritually we learn to respond to shifts and demands more gracefully and effectively if we are uplifted through and centered in the physical spine. Helping students learn that kind of awareness of the spine is helpful on all levels of life.

"Core Guidelines" for Teaching Yoga

How much do you think a yoga teacher needs to refer specifically to engaging core muscles, versus simply telling the body to keep an uplifted, neutral spine, and leave it to the body to engage where it needs to in order to accomplish that? If it's sufficient simply to keep an uplifted, neutral spine, then our awareness is going to be freed up for subtler things that have more to do with energy and consciousness, and less to do with the physical body.

You can take a lot of the fun—and depth—out of the postures by micromanagement. I feel that most people benefit from general cues: Lift up through the spine, tuck your pelvis, draw your navel toward the spine, and so on. Sometimes individual muscle focus is very helpful—when a person has weak muscles in some places, or an injury (even minor injuries can shut off certain muscles)—but that's a therapeutic arena; it's not what we're talking about here. I feel that, for most people with healthy bodies, especially in Ananda Yoga where our focus is primarily on energy, we want the cues to be more general.

A lot of it takes care of itself when we think about lifting through the spine. However, I'm not saying there isn't a place for more focused instruction from someone qualified. Our bodies and karma can be very complex, and an individual may need more attention drawn to a specific muscle group, but we don't want to forget the whole person as we work on specific parts.



Some Posterior Trunk Muscles

The multifidus spinae muscle consists of a number of fleshy and tendinous fasciculi (bundles of skeletal muscle fibers surrounded by connective tissue), which fill up the groove on either side of the spinous processes of the vertebrae, from the sacrum all the way up to the axis (C2, the second cervical vertebra). The multifidus is a very thin muscle. It lies deep to the spinal erectors (erector spinae), transverse abdominus, and internal/external obliques. The fasciculi vary in length: the most superficial, which are also the longest, pass from one vertebra to the third or fourth above; those next in order run from one vertebra to the second or third above; the deepest connect two contiguous vertebrae. Together, they work to stabilize the vertebral joints at each segmental level, making each joint work more effectively, and reducing the degeneration of the joint structures.

But most of the time, a lot will be gained from an emphasis on general good body mechanics and "good posture."

When teachers say, "Engage your core as you enter the forward bend," I wonder: "What will students engage when they hear that? The rectus abdominis?" That would tend to round the spine, which is not what we want at all.

True, if students don't know what that phrase means, they may assume that you're referring to the abdominal muscles. That might lead them to think that a forward bend is about rounding the spine. In reality, the whole trunk should activate harmoniously, although the multifidus muscles on the back may be exerting the most effort in order to maintain a neutral spine and to keep the spine and pelvis together as a unit as we enter into the first phase of the pose.

I prefer to say, "Bend at the hips and keep the spine long and the front part of the body open, as you enter the first phase of your forward bend." This allows us to lead with the heart and have a much fuller breath in the pose.

Another example is in standing backward bends: You don't have a neutral spine in those, obviously, but neither do you want to "collapse" (excessively bend) the lumbar spine. The abdominals and multifidus have to work in harmony to help prevent such a collapse. The abdominals don't just let go or get stretched; rather, they contract *eccentrically* to prevent the bend from going entirely into your lumbar spine. The contraction of the multifidus helps to lift the movement throughout the length of the spine, which opens the heart and also helps to prevent a collapse in the low back.

Can one learn to be aware of and engage the deeper back muscles in isolation?

If you're very still during the tensing and relaxing of the back muscles in the Energization Exercises you can sense those deeper muscles. At first, you may have to *imagine* that you feel them, or put your hands there and feel deep inside, but the awareness does come.

I don't go into a lot of detail with individual muscles in teaching asanas, though, because I want people to get the feeling of the movements, not just intellectual information. Still, the deeper muscles of the trunk (e.g., the multifidus) are very important, because that's where our refined movement comes from. The larger, more familiar muscles (e.g., the latissimus dorsi) are the heavy lifters, but some of the deeper muscles provide us with the endurance to have postural control throughout the day.

Muscles of the Pelvic Floor

Do the deep pelvic muscles [the perineal muscles, or "pelvic sling," a complex of short muscles that criss-cross the floor of the pelvis] play a role in the core?

Energetically, yes. If you're in Warrior Pose and you're sagging into it, those pelvic floor muscles may be sagging

Ananda Yoga on the Road

by Gyandev McCord

Diksha's and my 2008 programs in Los Angeles, India, Tennessee, Wisconsin, Idaho and Indiana went extremely well. Here's our schedule for 2009:

Jan 2–4	Los Angeles—"Overcoming Obstacles:
	Yoga's Solutions for Challenging Times"

- Feb 8–25 "Ayurvedic Healing and Yoga Retreat" in Kerala, India
- May 8–10 Chicago, IL—"Overcoming Obstacles: Yoga's Solutions for Challenging Times"
- July 10–12 McCall, ID—"Overcoming Obstacles: Yoga's Solutions for Challenging Times"
- Oct 2–4 Mitchell, SD—"Overcoming Obstacles: Yoga's Solutions for Challenging Times"
- Oct 9–11 Monteagle, TN—"Overcoming Obstacles: Yoga's Solutions for Challenging Times"

Do you have friends who might be interested? Please contact me, or visit WaysToFreedom.com.

Spreading the Joy

A weekend retreat near you is a great way to create a sense of community among your students, and "fire them up" for more depth. If you would like to help manifest one, please contact me. We're already booking into 2010. Let's spread the power of Ananda Yoga everywhere!

as well. We emphasize in Ananda Yoga lifting ourselves energetically and physically in our asana. When you level the pelvis and lift through the top of the head then everything can draw up, even though you're not *trying* to engage the pelvic muscles—it can happen naturally because of what we're doing with our energy.

I think that having appropriate tone in the pelvic floor has a physical and energetic benefit, but I rarely teach students to engage the pelvic floor except as an exercise in itself. Adding a contraction of the pelvic floor during asana might be confusing for a lot of people, and adversely affect attempts to breathe softly or work on alignment in other areas.

Of course, some people simply cannot feel anything down inside the pelvis, and they might need to consciously lift the pelvic floor a bit, to become more aware of those muscles and develop energy awareness. In time the energy focus will help that physical lift to happen automatically. But for most people, doing it consciously is confusing or unnecessary—or both.

I should add that, for all women, especially in menopause and aging students, toning the muscles of the pelvic floor is very important for maintaining urinary status, and a sense of vitality in that area. You want all areas of your body healthy and vital, regardless of your reproductive status. The pelvic floor provides support for the pelvic organs. So I have taught pelvic floor exercises, as a health measure, but I don't emphasis it in asana practice.

So if one can keep the spine neutral, does one even need to emphasize the core at all?

Although the core is very important, most students won't need to be all that aware of its component parts. Rather, they will benefit from awareness of the trunk as a unit in itself, and the value of having that awareness to protect the spine and help draw the energy inward by feeling more centered in their body.

Helping Students Develop Stability

If you see someone wobbling in class as soon as she brings her arms overhead, what's your first course of action?

Perhaps give her a gentle touch to bring her awareness to stability, or to straightness. Often that's sufficient. Some times a verbal cue will do it.

And if that's not enough?

Then perhaps she needs to build stability by increasing awareness and strength. You can do that in a step-by-step manner, starting with simple warm-ups. For example, making sure the shoulder joints have adequate flexibility. We can begin to explore spinal awareness in Tadasana (or "sitting Tadasana") and adding movements of the arms while focusing on maintaining a stable (not rigid) spine.

Then comes the next step: standing poses. We can first focus on moving just the legs, and keeping a neutral (or nearly neutral) spine and stable trunk. Poses like Vrikasana, Standing Backward Bend, or Utkatasana—even Virabhadrasana II—can be done with the hands at the heart. Then we can gradually increase arm involvement. Poses like Trikonasana or Padahastasana can be done concentrating on neutral spine as it moves through space, and add arms later. As we add arms in Vrikasana or Standing Backward Bend, we also have to allow for the possibility that some people will have the hands a bit ahead of the body, because they don't have enough shoulder flexibility to bring the hands directly overhead.

For more experienced students, you don't need to break it down to this degree, but for beginners, or for people who have trouble with stability, it can be helpful to work on stability in stages like this.

Repetition can be a valuable part of building awareness of and strengthening a neutral spine. Do a certain group of postures frequently—refine them and listen to them. Yes, add new ones to your routine from time to time, because the body is challenged and strengthened by variety, but keep repeating that basic group. With repetition you'll become more aware of core muscles as your awareness of yourself and the pose deepens.

Concluding Thoughts from Barbara

If you were to encapsulate everything you've said ...

Start with an awareness of a lift in the spine in simple moves, which is essentially trying to find your good posture. For most people this translates into more stability and an engagement of "core" muscles. Add to that an awareness of pelvic stability so you can maintain a neutral spine. Then keep the shoulder blades back and down for shoulder girdle stability.

All our movements from that point on should be done with an awareness of what the spine is doing. People have to be honest with themselves in knowing how far they should be moving their shoulders and hips, so they don't compromise the stability and neutrality of the spine, because that comes first. Movement of shoulders and other joints comes after that.

Especially in a deeper practice, you can lose the essence of it if you're spending all your time thinking about engaging different muscles. But I think it's necessary to give enough cues to enhance people's awareness of the spine, which will enable them to draw the energy up.

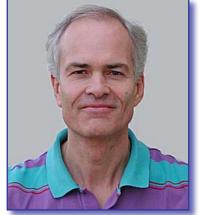
It's really quite simple: Watch your spine. Don't let it wiggle around. Breathe. And smile, because that brings fluidity and suppleness to your trunk and your entire being.

Alan on the Role of the Core

Gyandev: What is the core?

Alan: The "core" is the entire torso (upper body) whilst the extremities (the upper and lower limbs) rely upon the core for stabilization and force production. It is not simply the abdomen, as the abdomen is continuous with the thorax, etc. The body is always a whole, so the

concept of the core is really an arbitrary one. It is a means to see and understand part of the whole in a better and clearer light. It's problem when the core is treated in separation and isolation from the other parts of the body, assuming almost mythical status! It is simply part, not the whole picture. It is a way of describing how the torso functions for ease of understanding, and to see how important it is to work this area in a balanced way and integrate its functions with the rest of the body.



Alan Williams is an osteopathic physician, Ananda Yoga teacher, and Pilates teacher. Originally from England, he now lives in Sweden, near Stockholm. He and his wife publish Inspire magazine.

Spreading Inner Peace, Card by Card

by Terí Pancoast

While I was at AYTT, Gyandev mentioned that another AYTT grad had made affirmation cards to hand out to her students.¹ So last fall I tried making some myself. Unfortunately, I soon realized that this was a very time- and labor-intensive process, with the result that the idea began to feel less and less attractive to me, and I abandoned the project.

Still, I wanted cards like that, cards that students could take home and keep with them until the next class, as a way to try to start to bring yoga—and specifically, Ananda Yoga—into



Teri Pancoast lives and teaches in Thief River Falls, Minnesota. She opened her new studio, tentatively named Inner Peace Yoga, on August 4 of this year.

every part of their lives. I wanted the cards to be attractive, too, but when I looked into having them printed on some beautiful paper, the expense was prohibitive—and besides, I couldn't find the sort of look I wanted. Then, not long after I opened my studio in Thief River Falls, one of my students came to me saying that she and her husband ran a printing press and would like to do some free advertising for me, to help me get off the ground. I gratefully accepted.

Then, after the initial project, I asked her what it would take to design these cards. I knew I wanted something floral and somewhat impressionistic, and she had a book with numerous designs that were a perfect fit. She said we could do ten different designs per page, and I could block out how and where I would want to put the sayings. She and her husband printed several hundred "shells" (i.e., sheets ready to have text printed on them), all with these same florals. I gave her 80 quotes—including Ananda Yoga affirmations [with appropriate copyright information—see the examples pictured here] and "angel words"—and we spent time together trying to put the each word or affirmation with the card that best suited it.

She told me her husband was willing to print these for free because he could see what a difference it made in her when she came to these classes. I was touched, but I wanted there to be an energy exchange, so we settled on a trade for yoga classes. I paid for the printing of the words and quotes, and can go back at anytime to have more printed, or different sayings on the same floral designs, until the shells run out. Because of the type of printing press they use, even a basic run grabs 20–25 shells and runs them through, giving me quite a few cards to hand out.

I make these cards available for students to take at the end of every class. Sometimes they keep them and some bring them back the next week to exchange them. Also, I often begin classes with having students close their eyes and take a card from the bowl or basket. Then as they are breathing, I ask them to try to bring that word into the breath, to see how they can embrace it with each inhalation, and let go of what is keeping them from embracing it with each exhalation. I also use the cards to introduce students to affirmations, or to demonstrate that just a simple shift in thought can raise their awareness/consciousness.

The responses are all positive. The students drink up Ananda Yoga (as best as I can express it), and I regularly offer juicy little tidbits: "Yogananda says...." or "Swami Kriyananda says...." I have both of their photos on a wall, near a little display of Ananda books, tapes, CDs, etc. That, plus these cards, help the students tune in to these two great teachers.

By the way, I listened to Gyandev's (and Fran's) advice during AYTT: "Every handout is a marketing piece, so be sure your info is on it." Well, these cards are exactly the size of business cards, and I printed a version of my business card on the back of each one. It works great!

Although I know the students like the cards, still it's always fun and inspiring to see individual reactions. For example, one day not long ago, just before I was going to begin class, a student from another class came in specifically to tell me she had had "a bit of a day." She was trying to do the techniques she was learning in my classes; she told me they had helped her so much through this ordeal she was going through. As she was leaving, she asked me if she could take another card because she would need another one for the rest of her week. Of course!

I have placed the cards by the door, so that at the end of class each student can take one as he or she leaves. I often notice them closing their eyes and picking just the one they will need \dots

At right are some of the cards (actual size) that Teri hands out to students, plus her business card (bottom). Interestingly, her studio address isn't on her card. One reason is that she thinks that her studio location might change before long. But more important, "I like to talk with the students before they 'just show up,' as I don't have a lot of room for drop-ins at this point. Also, I like to explain what I am teaching—especially in a community that is so small (pop. 8400) and sometimes a little closed to new ideas."

¹ It was the late Fran Zabica from San Pedro, CA—see *Awake & Ready!*, Summer 2005 for her entertaining story about this idea.



Core Curriculum *(continued from page 5)*

Most yoga teachers seem to speak about the core solely in terms of its role in stabilizing the torso, or spine. How do you see it?

In my experience, many people grab hold of a term, and see it in isolation from everything else. One structure may have a major role, such as stabilization, but also another part to play, such as in contributing to movement. We can isolate whatever body parts we want to, theoretically, but in reality the parts work together in a very synchronous manner, and this involves the intelligence to play more than one role. So I think of the core as an "action center" that has a number of very important functions, including:

- Protect the central nervous system and internal organs
- Support the internal organs and provide gentle mobilization of them through movement
- Improve circulation and the fluid dynamics (flow) through the organs
- Support the circulatory systems by helping to move blood and lymphatic fluid around the body
- Provide a strong, stable foundation for body movement, without which the spine and extremities would not function properly, which can predispose one to injury

If we view the core as having an inner unit and an outer unit, each having specific functions to perform, then we can see how balance of different layers of muscle groups is important for optimal function:

The inner unit is about stability: It comprises the deep spinal muscles (multifidus), pelvic floor muscles, the deepest abdominal muscles (tranversus abdominis) and diaphragm (*see illustrations, pages* 2-3, 9). The internal obliques and latissimus dorsi also assist the inner unit. The inner unit's job is to stabilize the spinal column, rib cage and pelvic girdle so that the head, arms and legs have a strong, stable foundation from which to act. Stabilization begins in the inner unit muscles and progresses outward toward the periphery of the body.

The outer unit is about mobility: It consists of the muscles designed to move the body, such as rectus abdominis, internal and external obliques, and erector spinae (*see illustrations, pages 2–3*). Think of the outer unit muscles being like the powerful engine in your car, whereas the inner unit muscles are the suspension system that

holds everything together and prevents shock and stress from damaging structures.

In a balanced body, these functions support and supplement each other through coordinated action allowing for smooth, efficient, effective movement production throughout the entire body.

Differentiation vs. Integration

So the internal obliques belong to both units. That suggests that one cannot strictly differentiate between inner and outer core from the standpoint of which muscles one engages to perform certain activities (stabilizing or mobilizing)?

Strict differentiation is useful only for ease of understanding. Certainly top athletes and dancers do not know—or care—about the specific actions of muscles. But such knowledge can help a professional discover how to help an individual recover from an injury, or change an inappropriate movement pattern. Isolation is valuable only as a stepping-stone toward integration—and it is the integration of muscle action, ligament integrity, etc., that will produce healthy and efficient movement, or stability, or both.

I feel that the intention is what's important. When we perform (or refrain from) a movement, we don't need to think, "Well, I need to contract the transversus abdominis now, and then the multifidus, etc." In fact we don't even need to know the names of muscles in order for them to do their jobs. The body is so intelligent that it knows what to do and how to do it—*if* it is allowed to, that is, *if* it is guided by the intention, or thought, to do it. That thought will initiate the correct sequence of movements, the correct involvement of body parts.

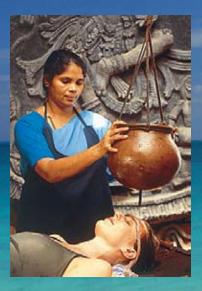
The difficulty is, when it comes to performing a movement, some people do not *know* what they should be doing; they do not understand the desired outcome. For example, if you say to someone, "Stay stable now," he or she may have no idea how to do it. This confused intention can lead to repetition of an incorrect movement. Eventually it becomes a deeply ingrained bad habit! So getting clear on what to do, and how to do it consciously, will lead to doing it unconsciously and correctly.



Ayurvedic Healing & Yoga Retreat

Kerala, India 🌤 February 8–25, 2009 Led by Diksha & Gyandev McCord

Jhere's still space for you!



There's still time: Two deeply relaxing, healing, rejuvenating weeks of Ayurvedic treatments and Ananda Yoga in the seaside tropical paradise of Kerala's finest Ayurvedic resort—with an optional add-on trip to Ananda's new community in Pune. It's a once-in-a-lifetime experience. All-inclusive rates from \$4650. Visit www.expandinglight.org/kerala. Or write directly to Diksha: diksha@expandinglight.org.

It was the best vacation I have ever had. – AYTT grad Lan Gluckman

There aren't enough superlatives to describe this trip. I vacation a lot, and have been to many places in the world, and this was without a doubt the best vacation experience I have ever had. I want to go again! — AYTT grad Charlene Gier



The Pelvic Floor

I suspect that most people can grasp the stabilizing role of, say, the multifidus more easily than that of the pelvic floor muscles. Can you explain their role?

The pelvic floor doesn't attach directly to the spine, so it may not immediately be referred to as a spinal stabilizer. However, in its integrated function along with other muscles, it completes a "circle" that provides stability and support for the organs, both when the spine is stationary and when it is mobile.

Here's how: I think of the pelvic floor as one of several "trampolines" in the body: one supports the brain, one the lungs, one the pelvic organs, and one the foot structures. They are "transverse tension membranes." The pelvic floor muscles provide essential everyday support for the pelvic viscera (organs, e.g., uterus, intestines, bladder) and maintain the integrity of urinary and anal sphincter function. Like any trampoline, if the tension in the pelvic floor gets too loose, it will not function correctly, especially when exertion (through exercise or natural bodily functions) builds up pressure against the membrane.

Like everything in the body, the pelvic floor doesn't work alone; it is part of a system. It is part of the "inner unit," the muscles of which together form a closed framework for all the internal organs. By stabilizing the contents of the pelvis, the pelvic floor contributes to the overall stability of the larger "core" (not just the spine).

It's like the foundation of a house: take it away and the walls begin to lose structural integrity. Then again, just having a strong foundation without strong walls is not helpful either. This is an example (theoretically, I suppose, but then it becomes very apparent practically to someone who suffers from a weak pelvic floor!) just how important it is for the body to function as a whole, with each part doing its job well. The whole is only as strong as the interaction of its parts, and the pelvic floor is definitely one of the parts.

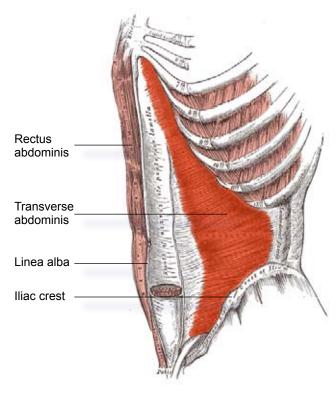
One simple exercise to maintain its integrity is to attempt to stop the flow of urine during *micturition* (passing urine). Oddly enough, many women are given pelvic floor exercises in the supine position—I say "odd" because the pelvic floor needs to maintain adequate function mostly in the *upright* position!

The Core in Asana Practice and in Daily Life

What role does, or should, the core play in asana practice?

Asana practice is an ideal opportunity to focus on not only our physical movement, but also our *control* of that movement. Trying to connect our mind and body, our thoughts and emotions and experience of a pose, gives us a chance to feel what our body, including our core, is doing.

Asana practice provides us with all the movements we need for daily living, such as bending, twisting, balancing, bearing weight—and it challenges our conscious control



Transverse Abdominis

This view of the left anterior torso shows the rectus abdominis and transversus abdominis (TVA), the innermost of the flat muscles of the abdomen, just beneath the internal oblique muscle. The TVA helps to compress the ribs and viscera, providing thoracic spinal and pelvic stability. It has horizontal (i.e., transverse) fibers, running from our sides (anterior iliac crest, inguinal ligament, and bottom rib) to the front (where it merges with the linea alba and internal oblique). It also is connected to the diaphragm, which helps with inhalation.

of those movements. Daily life consists of these movements also, but are we controlling them? Often we are not attentive when lifting, bending etc.; we're thinking about something else, which separates body and mind. In asana we have the chance to go within and control and experience our movement and become more aware of what we need to do, and how our thoughts and emotions affect it. It also requires balance; the core must have balanced development to play its role effectively.

In a sense, asana practice can take us more into our connection with daily life and activities, as it is the ideal preparation for the multitude of activities coming our way. It allows us to become unconsciously competent by ingraining movement patterns that are effective and efficient, so when we enter back into daily life activities our nervous system has already been challenged and prepared for the task.

In short, because of the many physical movements asanas require, the "core" has to adapt in positive ways (if practice is correct in terms of alignment and safety, etc.) to control how well we balance, move, stretch, bend, twist, etc. The core is important in yoga, Pilates, weight training, tennis, golf, swimming etc, just as it is in lifting, bending, twisting, farming, carrying the kids, carrying the boxes, carrying the rubbish out to the dustbin, etc. It's just that we have more conscious time for ourselves during a yoga session!

You seem to be saying, "Make the movements of asana consciously and correctly, and your core will do what it needs to do to keep you safe—not only in asana practice, but in daily life." That is very different from what one often hears: "Engage your core so that you can make the movements of asana safely."

Yes!!! And some people learn best from verbal cues, some from visual cues, and others from tactile cues. But if students who learn best from tactile cues (or adjustment) never get any, but instead see only visual cues—i.e., the visual example of the teacher doing an asana perfectly—they may not understand what to do. They may *think* they are doing the same thing, but in fact they are doing something else that may not be appropriate.

So in our classes we have the opportunity to help students make their movements consciously and correctly, but only if we understand that they need different modes of instruction. Without clear understanding of what the "core" is, "Engage your core," can mean a hundred different things to a hundred different people—none of which may be useful at all!

I often hear "Engage the core" without reference to why, or whether some parts of the core should be engaged more and others less. For example, when a teacher says, "Engage your core as you move into the forward bend," are students being asked to engage everything in the abdominal region and lower back, plus perhaps the pelvic floor? And how vigorously should they engage in each region? There is so much room for misinterpretation, which can lead to students fighting against themselves—e.g., virtually strangling the breath, and, if they engage the rectus abdominis significantly, shortening and rounding the spine at a time when it should be kept long and straight.

Gyandev, it is so good to hear what you say! There are so many well-meaning instructions given, without even the slightest hint of real understanding of what is being said!—not only in yoga, but in all forms of exercise, which is why so many people get injured in exercise classes or gyms! In a forward bend, contracting the rectus abdominis can indeed be detrimental to performance of the movement.

So conscious movement is one thing, but conscious and *correct* movement is quite another. Concentrating on the movement performance (the intention and outcome) is far more appealing to me, than concentrating on the specific muscles involved in that movement. In fact, too much concern over specific muscles could create tension instead of ease of movement.

AYTT Grads on Yoga Alliance Board of Directors

by Gyander McCord

Congratulations to Lynn Bushnell (AYTT Jan 2004) of Laguna Niguel, CA, who was elected to the Board of Direc-

tors of Yoga Alliance last spring. In addition to her love of yoga and her deep respect for the broader yoga tradition, Lynn brings to the Alliance her extensive experience in marketing and non-profit organizations. She has already been appointed to chair the Nominating Committee, the group that searches for new board members. Lynn expects to complete her Level 2 Ananda YTT certifica-



tion in Summer 2009 (and hopes that many of her Ananda YTT buddies will join her for *Advanced Pranayama* and *The Essence of the Bhagavad Gita*—see page 12 for dates). We wish you all the best on all fronts, Lynn!

And here's a surprise: I, Gyandev, am once again on the Yoga Alliance Board. A cofounder of the Alliance, I served for eight years on the Board until 2006. I also chaired the Alliance's Standards Committee that entire time. I've continued on Standards (no longer chairing it), and last September, I was approached to "re-enlist" for Board service. Here we go again!

Concluding Thoughts from Alan

Any last thoughts you'd like to offer?

To be honest, I think the less the term "core" is used, the better, unless it is understood. Even then, just because the teacher understands it, doesn't mean he or she can convey the concept to others—or even needs to. Focusing solely on one thing tends to exaggerate its importance, and that can lead to imbalance. For example, if people do only crunch situps, they develop the rectus abdominis to a point of imbalance that negatively affects the lower back. The hip flexors work in harmony with the trunk flexors, which work in harmony with the neck flexors. All these work in reciprocal harmony with the muscles on the opposite side of the body: the back muscles and erector spinae. There is a natural balance and harmony built into the body, which can be damaged through inappropriate practice.

I remember a tenet I once read: "It is better to spend years looking for the right teacher, than to spend years studying under the wrong teacher." So it is with "teachings" about the core. ◆

The second part of this article will feature input from Ananda Yoga teachers Julie Bryant (a chiropractor) and Nicole DeAvilla (Ananda's Therapeutic YTT trainer—see calendar, page 12).

Ananda Yoga for Multiple Sclerosis

by Gyander McCord

Many of you have asked about the results of our study, *Ananda Yoga for Persons with Multiple Sclerosis*. The data analysis is nearly complete (it takes a long time, we've discovered), and I'll tell you what we know so far.

First, some background: The study was conducted jointly by The Expanding Light, the California State University Sacramento (CSUS) Department of Physical Therapy, and the Sierra Family Medical Clinic. It was made possible by four "angels": Maitri Jones, Suzanne Ilgun and Mangala Loper-Powers (all from the Ananda YTT faculty), plus principal investigator Dr. Bryan Coleman, an Ananda Yoga teacher and Ananda Sacramento resident who is also a faculty member of the CSUS Department of Physical Therapy. Together they overcame many challenges to make the study a resounding success.

What We Did, and What Happened

The study explored the effects of a 16-week Ananda Yoga program on mobility, fatigue, balance, respiratory function and quality of life in individuals with Multiple Sclerosis (MS), a chronic inflammatory disease affecting the nervous system. The participants (28 people, all with mild to moderate MS) first completed a one-month "control period," at the beginning of which they were tested on a number of measures so we could get a glimpse of their "normal" state. When the control period ended in January 2008, the active phase of the study began with a five-day program at The Expanding Light. We tested them on the control measures, plus a variety of additional measures related to physical function. Then we taught them:

• A sequence of Ananda Yoga postures, modified for this population's physical needs

- Energization Exercises
- Hong-Sau meditation

They agreed to practice three times a week at home with a DVD that led them through this program.

Almost all of the participants—24 of 28 (*see photo be-low*)—completed the study. Many of them practiced three times per week as requested; some practiced even more. When they returned for a powerfully joyous reunion at The Expanding Light in May, we once again tested them on the above measures.

So far, Bryan and his team at CSUS have analyzed data for seven tests of physical functioning and eight standardized quality of life measures. All the physical functioning measures (including muscle strength and tone, and walking endurance) improved, with statistically significant and clinically important—improvements in:

- Functional strength
- Preferred walking speed
- Respiratory flow
- Balance

As for the quality of life measures, the participants reported:

- Significantly decreased impact of fatigue in their lives
- Improved physical functioning, mental health and feelings of vitality
- Significantly improved attention and concentration, memory, planning abilities and positive affect (i.e., positive feelings)
- Significant decreases in depression, anxiety and perception of cognitive deficits.

No significant changes were noted in pain, visual acuity or bowel and bladder control.

Beyond the Data Obviously, these results are outstanding and highly encouraging for both Ananda Yoga teachers and MS patients. We felt initially—and now, we feel even more strongly—that Ananda Yoga, with its emphasis not only on

the body, but also on the mind and soul, can make a unique contribution for this population.

The feedback from the participants was even



more positive than the data—and sometimes in ways that mere numbers simply cannot show. Everyone had his or her favorite aspects of the program—postures for some, Energization for a number of them, and meditation for quite a few, too.

One comment that lingers in my mind was from a woman who, at our very last session together, said: "I don't know what lies ahead for me, but I do know this: No difficulty could outweigh what I've gained spiritually from this. I am so much more than I ever thought, and *nothing* can take that away from me." We saw her again this fall, and she reported that she has had no MS symptoms since January. Others from the study are still doing the practices as well, because they're seeing results!

This was an exploratory study, intended to show us whether Ananda Yoga could make a difference. Now we know: It can, and in a big way. As one of the participants said, "You guys are really onto something here." What a great start!

Beyond the Study

And there's more: Because we now know—even better than before how to tailor Ananda Yoga to help the MS population, in Autumn 2009 we'll offer a program specifically for people with neurological disorders. We are eagerly anticipating this opportunity to significantly help, not only people who have MS, but those with Parkinson's Disease or even a history of stroke. The program is not a research study—no measuring; it's a "consumer" program designed simply to help the participants. If you know anyone whom you think might benefit from this program, please

AYTA CONTACTS

Level 2 Questions • Membership • AYSutra

Maitri Jones, 530-478-7518 x7089, maitri@expandinglight.org

Articles for Awake & Ready! Gyandev McCord, 530-478-7518 x7081, gyandev@expandinglight.org

The Expanding Light 800-346-5350 / 530-478-7518 • fax: 530-478-7519 • info@expandinglight.org contact Maitri (see left). It's a whole new era of service. Thank you to Maitri, Suzanne, Mangala and Bryan—and numerous others—for their tireless efforts to make it happen. And thanks above all, to Paramhansa Yogananda and Swami Kriyananda, for giving us the tools and insights to help these wonderful, courageous souls. ◆

Level 2 Calendar

Please remember that AYTA Members receive a 15% discount on all Level 2 programs. If you need financial aid, please contact The Expanding Light for an application. All of the following courses earn Level 2 credit; those with "★" are required for Level 2 AYTT certification.

2009

1/8–11 Yoga for the Chakras: Balance Your Core Energy
1/14–18 Kriya Yoga Preparation
2/8–25 Ayurvedic Healing and Yoga in Kerala, India (see page 8)
2/11–15 Kriya Yoga Preparation
3/13-22★Meditation TT—Level 1
3/22–4/4★AYTT Assistantship
5/24-30 Meditation TT—Level 2
5/20–24 Kriya Yoga Preparation
5/31-6/5 Ayurveda & Yoga Retreat
5/31–6/13 ★AYTT Assistantship
7/19–26★Advanced Pranayama
7/26–8/1★The Essence of the Bhagavad Gita
7/31–8/9★Meditation Teacher Training—Level 1
8/1-4 Restorative YTT
8/4–9 Yoga Therapy Teacher Trng. for the Spine & Pelvis
8/12–16 Kriya Yoga Preparation
8/23–29Ananda Yoga Intensive
10/16–25★Meditation TT—Level 1
10/25–11/7★AYTT Assistantship

The Expanding Light

14618 Tyler Foote Road Nevada City CA 95959 www.expandinglight.org