

<show opener>

Nicole Johnson Baker: Hello. I'm Nicole Johnson Baker.

J. Anthony Brown: Hi. I'm J. Anthony Brown.

Jim Turner: Hi. I'm Jim Turner.

Mother Love: Hello, babies. I'm the even more fabulous Mother Love.

Nicole Johnson Baker: Type 1.

J. Anthony Brown: Type 2.

Mother Love: Type 2.

Jim Turner: Type 1.

J. Anthony Brown: And I'm here to talk about my--

Jim Turner: My--

Mother Love: My--

Nicole Johnson Baker: My dLife.

Mother Love: Today on dLife, how diabetes affects our relationships, featuring a psychologist and a father whose son has diabetes, and a dLife hero with an astonishing international reach. And, now, please welcome your hosts, Nicole Johnson Baker, Jim Turner, J. Anthony Brown and me, Mother Love.

<Applause>

<dLife hosts seated on stage>

<Card: Mother Love, Author & TV Personality>

Mother Love: Welcome to dLife, everybody. This is the show where we talk all about relationships, the good, the bad, and the ugly. Whether you are a parent, spouse, sibling, a friend, we are all connected to each other. And, frankly, sometimes diabetes gets in the way. Right dLifers?

Nicole Johnson Baker: Oh, sometimes it does.

Mother Love: It's not pretty all the time.

<Card: Jim Turner, Actor Bewitched & HBO's Arli\$\$>

Jim Turner: No. When I first got diagnosed my- my mom just felt just horrible guilt. And she asked my doctor what she should, you know, do. And he really steered-- he said, you let him figure it out, you put three meals a day on the table and let him figure it out, and just, like, pushed her aside. And she was frightened of him and she felt horrible. And, so, I really grew up with-- I really always had to figure it out. And, now, when we have family gatherings and we talk about, you know, my diabetes, she never asks me questions. She never asks, you know, the-- and she watches my, you know, aunts and uncles and cousins ask me questions and listens for the answer and just won't, you know-- she doesn't crowd that way.

Mother Love: Will not have a dialogue with you? That's got to be difficult, though, you know?

Jim Turner: Yeah.

<Card: Nicole Johnson Baker, Author & Miss American 1999>

Nicole Johnson Baker: In my situation, it's been a little bit different. I mean, entering into a family where there are already children. I have three stepchildren who are 10, 12 and 15. Diabetes has been a blessing because it's been an opportunity for them to become more emotional, to become more caring, to be more hands-on because they'd never had this experience. But, then, it's also something that at first they were really

scared of. And so now they've learned how to check my blood sugar. Sometimes they get their blood sugar tested and run for juice. And it's just an interesting relatable moment that we have so often.

<Card: Make sure siblings, loved ones, co-workers and/or roommates can recognize a diabetes reaction.>

Mother Love: But that's great because it's kind-- you know, it's kind of like a way you guys are bonding like that.

Nicole Johnson Baker: Yeah. And now with this baby on the way--

<Applause>

<Card: About 6% of parents with Type 1 diabetes have children with Type 1 diabetes.>

Nicole Johnson Baker: -- it's become very interesting because now they've got the sense of a protective nature over me because of the diabetes and because they're concerned about how everything will work out. So it's really strengthened all of us.

Mother Love: It's so important to have a good support system. So, Jim, who emailed us today?

<Jim Turner standing in front of bulletin board>

Jim Turner: Pauline Kaufman from Bronx, New York. She was diagnosed with Type 2 diabetes two years ago and she writes, "My biggest problem is my husband. It's nothing for him to eat a whole sleeve of chocolate chip cookies and wave them in my face. I try to eat just one, but I can't do it. I try not to let foods like that in the house, but he makes me buy them. He went out of town and I kept only healthy foods in the house. I moved more and my numbers were so much better. He's home all the time and it's hard."

<Card: Couples experiencing continued marital stress have a greater risk of a partner developing Type 2 diabetes.>

Jim Turner: "He's overweight, too. I really think he has Type 2 diabetes, but he won't go to the doctor to find out. I do check my blood sugars three times a day. They run about 135 to 155. But they're much better when he's away. I can't ask him to move out. I don't really want him to move out, but I do want more support." And the-- there's the Kaufmanns and they're here today, so I guess they're- they're working it out.

<Applause>

Jim Turner: Good. You help her.

Mother Love: You know, you are not alone in needing family support. So we really do appreciate your sharing your story with dLife. That's got to be really hard.

<Card: Do you have a story of the day? Share it with us at dLife.com>

J. Anthony Brown: I can relate to her story. I really did not want to accept the fact that I had diabetes. And I was married to somebody who was really on me in terms of checking the sugar, in terms of eating the right foods. And it was a big change for me because it was food that I did not want and it was food-- and I did not want to be serious about my diabetes. And it can cause a lot of problems in a relationship.

<Card: J. Anthony Brown, Comedian & Co-Host *The Tom Joyner Morning Show*>

Mother Love: Oh, absolutely. I was- I was really blessed because I didn't develop diabetes until well into my marriage. And, you know, because-- the divorce rate, you know, people with diabetes and any other kind of debilitating disease can break up and damage a relationship. I was so grateful that my husband was like, well, okay, you have diabetes, we're going to eat what you eat.

<Card: A family approach to diabetes management is shown to improve glucose control.>

Mother Love: Well, you would have thought my son said, I'm just going to feed you air sandwiches from now on because dude protested.

Nicole Johnson Baker: I remember when I was first diagnosed, my-- I was living with my parents. And they created a safe cabinet for me. So my brother had all the Twinkies

and the cookies and all that kind of stuff in the other cabinet, but I didn't have to look there if I didn't want to. I knew where my cabinet was.

<Card: Diabetes education is essential for siblings of Type 1 children.>

J. Anthony Brown: You never looked in the other cabinet.

Nicole Johnson Baker: Okay? Yeah. <Laughter> And I still do. But, you know, we said we were going to talk about the good, the bad, and the ugly. So, I mean, here's-- here's the good. When we think about marriages and family relationships, specifically marriages, marriages where a person enters into the marriage with someone with existing diabetes, so like you and me, those marriages tend to last a lot longer because--

J. Anthony Brown: Because the person knows before they go into the relationship--

Nicole Johnson Baker: Yeah.

J. Anthony Brown: -- the other person has diabetes. So it kind of works, right.

Nicole Johnson Baker: You're entering with your eyes wide open. It's just when you're surprised by it sometimes the divorce rate goes a little higher.

J. Anthony Brown: It kind of changes things.

Mother Love: It can get ugly. Before we move on, we here at dLife know the importance of testing our blood sugar. So we want you to pull out your blood sugar meters, and what do we do here?

All: We test; don't guess.

<Card: Test! Don't Guess.>

<Audience members testing blood sugar>

Mother Love: So while we're testing, get ready for what's up next. A psychologist and father who has lived through these issues will offer some practical solutions that helped him and his son get through the hard times. Stay tuned.

<commercial break>

<Applause>

<Nicole and guests seated on stage>

<Card: Nicole Johnson Baker, Author & Miss American 1999>

<Card: Dr. Richard Rubin, President-Elect, Healthcare & Education American Diabetes Association>

Nicole Johnson Baker: Well, welcome back to dLife. Dr. Richard Rubin will be the first psychologist to take the reigns as President of the American Diabetes Association. From the time that his son Stefan was diagnosed with Type 1 at the age of seven, Dr. Rubin has looked at how emotions impact how people manage this disease. They're both here today to talk about how hard diabetes can be on family relationships. So, first of all, thank you so much for coming and for being with us. What type of conflicts did you deal with as a teenager and young adult?

<Card: Stefan Rubin, Living with type 1 diabetes>

Stefan Rubin: I would have to admit that most of my conflicts with my dad resolved around typical teenage issues rather than diabetes. We had our share of diabetes discussions, but we generally dealt with it as more a problem-solving matter than really a conflict. We had one big fight, I would say, over diabetes, and that came probably when I was 19 or 20 and I was having a bad diabetes night and my blood sugar was out of control and I wanted to spend the night at my girlfriend's house. And I came home, I was going to change over my infusion set for my insulin pump and get all of my extra testing supplies and get absolutely everything that I needed to go out and do what I had to do to take care of my diabetes.

<Card: Insulin pumps are devices that deliver a constant flow of insulin.>

<Card: Open family communication prevents many psychological repercussions.>

Stefan Rubin: And my dad, I don't know if he was having a bad night due to something else, but he felt like that was just the worst decision I could make in my diabetes management history. And I felt for sure that not only was I taking care of myself, that I was going to be able to take care of myself, I had learned enough from the age of seven until that time that I was going to be able to manage this on my own whether I was at a girlfriend's house or at home.

<Card: Parents and kids should communicate openly about drinking, drugs, and sexual health.>

Stefan Rubin: And, so, we got into it a little bit that evening. But it really showed me that at that point I had taken all the stuff we had learned together and that I was able to go wherever and whenever and deal with my diabetes, whether it was a rough night or a good night. And I wanted to be with my girlfriend, not home with my dad, and so I went and did what I had to do.

Nicole Johnson Baker: Wow.

Dr. Richard Rubin: He was right.

Nicole Johnson Baker: He was right? You think so?

Stefan Rubin: That's another lesson I taught him.

<Laughter>

Nicole Johnson Baker: At the ripe age of 19, right?

Stefan Rubin: I mean, I have to say first off that I was amazingly lucky to have both very supportive parents and, as amazing as my parents were, my dad particularly, after two years of us learning about diabetes together, he just became to me an amazing teammate and still is my amazing teammate in dealing with diabetes.

<Card: A child's blood sugar control is largely related to how the parents manage the diabetes.>

Stefan Rubin: And so it's nice to have that support and we all need that support. And it really is special to me that I feel like he's taken what we learned together dealing with my diabetes and has now gone on to help people around the world, really, live better with their diabetes in much the same way that we did.

Nicole Johnson Baker: And, Dr. Rubin, how did-- did Stefan's experiences change the focus of your life and your career?

Dr. Richard Rubin: Well, in some ways, I feel like I was born to my career because my sister from the time that I was 15 years old had diabetes. So I knew about diabetes way, way, way longer, in 1959. Forty-six years ago, more than 46 years ago, she was diagnosed. And, so, when Stefan first got diabetes, it was a shock to me because I remember how hard it was to live with my sister's diabetes, how demanding it was, and I was feeling kind of overwhelmed. And so I can remember still going to the pediatrician's office, a good friend of mine, to get the diagnosis confirmed, and the pediatrician went through all the list of things that we were going to have to do and live with, and I could feel myself just almost completely devastated, really overwhelmed. And then the pediatrician said to me, okay, Dick, pull down your pants, you're going to stick yourself with a needle to show Stefan that it doesn't hurt too much. And as- as down as I was in that moment, this crazy thought went through my mind: Thank God I'm wearing clean underwear.

<Laughter>

Dr. Richard Rubin: And, you know, the amazing thing, it was probably one of the biggest most enlightening moments of my life. It put me on the stage for doing all the work I did because what it told me at that moment was what you're thinking to yourself, what you say to yourself, and what's in here can powerfully affect how you manage anything. And the fact that I could laugh in that minute and then share it with Stefan and share it with his mom, we just felt not like diabetes was going to be easy to manage, but maybe we'd be able to manage it.

<Card: Both parents of a Type 1 child should learn how to give injections, measure insulin, and treat highs and lows.>

Dr. Richard Rubin: And, so, from that point on, I really made my career working with people who have diabetes and their families, helping them, and doing lots of research to learn everything we can about how important the emotional side of diabetes is in people's ability to really deal with the disease and live well.

Stefan Rubin: As hard as it is on the parents as they watch these teens struggle and deal with these things, it's very important to remember that the kid has to take ownership of the diabetes, that they're going to be out there by themselves sooner rather than later in most situations, and that the way for the parent to feel most comfortable is to help them and teach them, but also give them the ability to make those decisions and problem solve as they're going through it, because that's what they're going to do when they're out there in the real world.

<Card: Talking about your diabetes leads to better attitude and control.>

Nicole Johnson Baker: So, from both the personal perspective and your professional perspective, what was it that helped you guys get through the hard times and what can you tell other parents who are struggling right now?

Dr. Richard Rubin: Well, a couple of things. One is the love that we have for each other, the respect that we have for each other. And sometimes that gets challenged when you're dealing with diabetes and as a kid with diabetes because you're so worried as a parent, you're so concerned. You think anything goes wrong and the parent feels like it's all my responsibility to take care of this.

<Card: 3 million Americans have Type 1 diabetes.>

Dr. Richard Rubin: My poor child has this condition and I'm supposed to make sure his blood sugars stay where they're supposed to be. So, the first thing I had to learn beyond just the love and the commitment was this was not all on my shoulders. And, instead of my job being controlling my son's blood sugar, which is what most of us parents believe, I had to realize my job was different from that. It was to help him learn to control his own blood sugars.

<Card: There are more than 160 diabetes camps in North America, where kids learn how to take charge of their diabetes.>

Dr. Richard Rubin: And, so, rather than saying, well, you can't do this or you should do that, I would ask him in almost every situation, what do you think we should do now, you got a 340 blood glucose, we're just about to have dinner, what do you think you should do now? And he would always start to think about it because what we need for the kids to be able to do when they're out there in the world, and from the time they're seven or eight or nine, they're going to be someplace making those kind of decisions, is not, oh, my dad told me I shouldn't or my dad told me I had to, but here I am in a situation, there's the Twinkie, my blood sugar is 350, what should I do now.

<Card: To find a diabetes camp near you, visit dLife.com.>

Dr. Richard Rubin: And so I think that's another critical thing. The burden is not all on us. Keep the love there and stay on the same side of the fence because so often it seems like kids and parents are fighting over the diabetes rather than putting themselves both on the same side of the fence with the diabetes being on the other side.

<Card: A diabetes support group may help your family connect with others dealing with similar challenges.>

Nicole Johnson Baker: Exactly.

Dr. Richard Rubin: I have a dear friend who's had diabetes for many, many years, and when one of my first books came out called, *Psyching Out Diabetes*, she said, "I grew up with diabetes, I never talked to my mother about it, I'm so-- I was so upset about this, we never were able to talk about this."

<Card: Exercise is a natural anti-depressant, and improves glucose control and well-being.>

Dr. Richard Rubin: And my book had a section at the end of each chapter for family members. So she thought she'd take a chance. She sent the book to her mother just wondering what was going to happen. Her mother called her back almost right away, within the next day. She said, "Oh, I really thought that book was so good, but most important was we need to talk about stuff and I want to tell you something, dear," the daughter who had the diabetes. She said, "You know how I tried to keep things so clear in the house, we didn't talk about diabetes, but all the food was just the way it should be. Well, every night I would go out to the 7-11 and get candy and chocolate and ice cream."

<Card: Read more articles by Dr. Rubin and other experts at dLife.com.>

Dr. Richard Rubin: And my dear friend who has diabetes said, mom, I did the same thing.

Nicole Johnson Baker: Well, there's reality for you.

Dr. Richard Rubin: And Stefan can tell you about the gift he feels like he's been given by having to deal with this disease.

<Card: Managing diabetes is about choice. Choose life.>

Stefan Rubin: I feel like it really has given me an amazing skill which hasn't necessarily transferred to every area of my life. But with diabetes, I can problem solve with the best of them. And that works for me because that's a big part of my life.

<Card: Be it Type 1 or Type 2, young or old, people with diabetes must be problem solvers.>

Nicole Johnson Baker: You know, and the other thing I think is so special about being chosen to live with diabetes in whatever form, Type 1, Type 2, Type 3, is that it's given us an opportunity to connect with people in really very special ways.

<Card: A "Type 3" is a person who supports and helps someone with diabetes.>

Nicole Johnson Baker: And your relationship is proof of that. So thank you for sharing that with us.

<Card: Connect with our diabetes community. dLife.com>

<Applause>

<Card: Up next: dLife hosts share their hypoglycemic experiences.>

<commercial break>

<Applause>

<dLife hosts seated on stage>

<Card: Mother Love, Author & TV Personality>

Mother Love: We're back. And we'd like to take this time to talk to you about a very serious subject that has to do with having diabetes and managing it. And that's when we go low. When our blood sugars have plummeted to the point of we are not taking care of it.

<Card: Low blood sugar is also referred to as an insulin reaction or hypoglycemia.>

Mother Love: And how disoriented and how loopy you can get. And when I'm around my family and I-- you know, they can't tell if I'm low, but when-- except when I start acting really crazy because I'm--

Nicole Johnson Baker: Crazy?

<Card: Let friends, loved ones, and co-workers know the warning signs of hypoglycemia - and how to treat it.>

Mother Love: I mean, I start screaming. I'm like, get this out of here, I don't want to, don't touch me, move away from me. And they're like, oh, something is wrong with her, who is that crazy chick right there?

Nicole Johnson Baker: You're losing your mind. Like you're losing your mind. And then you get depressed because you're like, why did I just-- I can't even believe I spoke like that to you and I can't even believe I reacted that way.

<Card: Symptoms of a low include irritability, dizziness, sweating and shaking.>

<Card: Jim Turner, Actor Bewitched & HBO's Arli\$\$>

J. Anthony Brown: Sometimes you just want to go in the room and you don't want to deal with anything. You just want to stay away from everybody. Right.

Jim Turner: Sometimes you can't be-- you can't conceive of doing anything. You're absolutely-- I will just stare and stare and stare. And one time I went to the beach with my son and we were playing. He was maybe five years old at the time. And I just-- it just hit me, oh, you know what, I need something to eat right now, and I hadn't brought anything. We had all these toys and they're all over the beach and I was going, Otto, pick- pick up the toy, we got to-- and the snack shack seemed like miles away.

<Card: Wear medical ID that identifies you as having diabetes in case of emergency.>

Jim Turner: And I get all the stuff and I walked up and I had to pee, because sometimes actually low blood sugar makes you have to pee.

<Card: Medical ID is available at pharmacies, jewelry stores, and online retailers.>

Jim Turner: And I got up there and I was 10 yards from the toilet and 10 yards from the snack shack.

<Card: Always keep fast-acting carbs like glucose tablets with you.>

Jim Turner: And I stood there and I looked and I looked and I went, oh, I should go pee before I-- I should- I should, uhm.. and I just looked back and forth and back and forth.

<Card: Avoid over-eating with the 15/15 rule. 15 grams of fast-acting carbs every 15 minutes of a low.>

Jim Turner: And my son was going, "What are we doing? Dad, what are we doing?" And, finally, I sat down. I couldn't think of what to do first. And we sat there for longer than half an hour.

<Card: Program your emergency contact as "ICE" in your cell phone so they can be easily contacted In Case of Emergency.>

Nicole Johnson Baker: In my case, I feel like I'm outside of my body watching an engagement happen. And I'm watching myself react in a way that I don't want to be reacting to that person I'm speaking with, whether it's a child or a parent or my husband or a friend.

<Card: Over time, prolonged and frequent episodes of low blood sugar can affect brain function.>

Nicole Johnson Baker: And I can't figure out how to make myself stop. And it's so discouraging.

<Card: Chronic hypoglycemia can also cause hypoglycemic unawareness.>

J. Anthony Brown: Sometimes you just got to ask somebody to help you because you really don't know what's going on.

Jim Turner: The lows that I experience at night, when I'm having a dream, my dream is the absolute-- it's just totally real.

<Card: People with hypoglycemic unawareness don't experience the typical physical warning symptoms of blood sugar lows.>

Jim Turner: And I have very-- often very frightening, just nightmaric dreams. And sometimes they're sort of funny.

<Card: Fast acting glucose sources include glucose tablets, juice, or cola.>

Jim Turner: And I actually made a little movie, uhm.. about one of those low blood sugar experiences.

J. Anthony Brown: Oh, okay.

<Card: a dLife Minute with Jim Turner.>

<Jim's low blood sugar video segment plays>

Jim Turner: It's rare when an episode of low blood sugar is actually funny, and many won't find this funny. And my wife certainly didn't find it amusing. But one night in the middle of the night she came in and she woke me up because I was soaking wet and clearly having an insulin reaction. And I was in the middle of this dream where to go anywhere in the world all you had to do was think it and you go there. And I was

thinking, oh, I'm in Egypt, I'm in Iowa, I'm on the moon, and boom, I would go there. And it was this beautiful realization. It was going to change the way we all did things. And my wife is waking me up saying, "Jim, you have to drink this juice." I said, "Lynn, it's not about the juice. All you got to do is think it and you go there and you be there." And she said, "Please, just drink the juice." And I started drinking while I was talking and it was all going down my neck and my chest and all over the bed. And she said, "You're really scaring me." And then I just jumped up onto the bed and I said, "You think it, you go there and you be there!" And she said, "Shhh, you're going to wake our son." And I said, "Well, I should wake him! This is important!" I said, "Otto, get up! I got something really important to tell you!" And I said, "How simple do I have to make this?" And then I did this front flip onto the bed. And then I went running through the house totally naked and I leaped, twisting sideways, landing in the bed, and I looked up at her and I said, "What do you need to know?"

Mother Love: We'll be right back.

<Applause>

<photo of Mikhail Gorbachev>

<Card: Mikhail Gorbachev won the Nobel Peace Prize as Premier of the Soviet Union...and now he lives his life while managing his diabetes.>

<commercial break>

<Jim Turner seated on stage>

<Card: Jim Turner, Actor Bewitched & HBO's Arli\$\$>

Jim Turner: Welcome back, dLife. Sixteen years ago Jeff Hitchcock's daughter Marissa was diagnosed with diabetes. So what did he do about it? He created ChildrenWithDiabetes.com, a worldwide community for families whose children have diabetes. ChildrenWithDiabetes.com is known for a great website, their children's diabetes quilt, and an annual conference for children and their families. Watch.

<Children With Diabetes segment video plays>

Jeff Hitchcock: I think the biggest challenge that a parent who has a child with diabetes faces is helping your child live their life as if they didn't have diabetes. My daughter Marissa was diagnosed when she was 24 months old. That was almost 16 years ago.

<Card: Children With Diabetes hosts conferences, special events, and cruises for kids with diabetes.>

Marissa: A lot of people think diabetes is going to hold them back from everything. But it's given me so much more of a life.

Jeff Hitchcock: At the beginning, the goal for Children With Diabetes was to help Marissa meet other kids with diabetes, and expanded to focus on offering support to families who have kids with diabetes.

Marissa: Well, it started out with only, like, three families here. But now there are 2,000 people and we all share that same common bond of diabetes so we build our friendships off that.

<Card: The Children With Diabetes Foundation raises funds for scholarships, education, and international programs.>

Jeff Hitchcock: This is the beginning, setting up the Quilt for Life, which is a collection of, right now, 419 quilt squares, each representing a child who has Type 1 diabetes.

Marissa: I take care of myself to the best of my ability. I test so many times. And, as much as it pains me, I'd rather do that than have consequences. And I love encouraging others to do that.

Jeff Hitchcock: I think Marissa graduating from high school, going off to college, is proof that children with diabetes can and do lead wonderful lives.

Jim Turner: Well, please welcome the person who established a global relationship for families with Type 1 diabetes. He's right here in our audience and he's our dLife hero. Please, Jeff Hitchcock.

<Applause>

<Card: Jeff Hitchcock, Founder, Children With Diabetes>

Jim Turner: Jeff, thank you so much for coming on the show and for all you've done to help families across the planet. Up next, a tip from Dr. Sheldon Gottlieb to help you manage your diabetes.

<Jeff Hitchcock in audience>

<Applause>

<video of question from Phyllis for Dr. Gottlieb>

Phyllis: Hi. My name is Phyllis. I was just wondering. My husband has diabetes and he's got a very bad snoring problem. Is that diabetes related in any way?

<Card: Is excessive snoring related to diabetes?>

<Dr. Sheldon standing in front of bulletin board>

Dr. Sheldon Gottlieb: If you have diabetes and you snore, it's no laughing matter. People who snore and have a neck size greater than 17 and a half inches almost certainly have a condition called obstructive sleep apnea. If you think that that describes you, then you ought to get attention for this problem and have a sleep test and there is definitely treatment for the problem.

<dLife hosts seated on stage>

<Card: Jim Turner, Actor Bewitched & HBO's Arli\$\$>

Jim Turner: Well, we'd like to thank all of our guests and all the dLife community here and out there.

<Card: Hear more from today's guests and hosts with dLife TV Backstage Podcasts at dLife.com/podcasts.>

Jim Turner: Remember, as always, it's your dLife. You're responsible for your diabetes life. See you next week.

<Applause>

<Card: dLife on CNBC: Sunday Nights 7PM ET, 4PM PT.>

<Card: To order any episode of dLife TV, visit www.dlife.com/orderdlifetv>

<Closing credits>

Nicole Johnson Baker: Remember, we're not role models. We're people living with diabetes just like you. What we do and how we manage may work for us, but everyone is different. And you have to work with your diabetes care team to find out what works best for you. Remember, it's your diabetes life and there's no substitute for getting control of it.

End of Tape 4 Parsons EMP