The Embroidery Recipe

How Your Ingredients Affect Your Results



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Foreword

FOREWORD

by Deborah Jones

mbroidery education is a funny thing. When Lindee Goodall and I began our embroidery journeys, there was almost no embroidery education to be found. There were no books, no YouTube tutorials, no seminars every weekend. Rather, we experimented for ourselves and wrote down what worked. If we had a chance to meet up with another embroiderer, we compared notes on what worked.

Interestingly enough, there were no specially designed stabilizers for embroidery. Rather, we used everything from industrial paper towels and coffee filters for tear-away and broadcloth or dressmaker interfacing for cutaway. Today's myriad products for machine embroidery are highly engineered for specific tasks, and for that I know Lindee and I are grateful for the time and talent that has gone into their development.

Yes, embroidery education has come a long way, and today there are many embroiderers who share their ideas on how to do machine embroidery correctly. Some of these well-intentioned instructors are in fact beginners themselves who just want to help others with what they have learned. While there is no single "correct" way to embroider, I believe it's important to utilize information from appropriate, experienced resources.

I say all of this to make the point that Lindee's approach to machine embroidery has been developed over decades and her methods certainly stand the test of time. As a skilled artist, digitizer and embroiderer, Lindee not only learned this craft, in some ways she has helped to develop it—purring it along with her own unique designs, her talent and her teaching.

As another early machine embroiderer, I know how far this art form has come and Lindee Goodall has been a part of that evolution. I appreciate Lindee's contributions, her knowledge and willingness to share it here in this book. Please enjoy it, refer to it and let others know about it.



Considered by many to be one of the foremost authorities on machine embroidery. Peborah Jones writes the "Ask The Expert" column for Designs in Machine Embroidery magazine.

Peborah Jones has been involved in the world of machine embroidery since she was a small child. Her father was a Western Wear tailor who made embroidered cowboy clothes. She says "they were very cool palomino horses, wagon wheels and cactus - the embroidery was incredible."

Deborah was one of my early mentors and became a friend through this wonderful world of embroidery. I'm honored that she consented to write the foreward for this book!

About the Author



embroidery design & education

indee Goodall is the founder and former owner of Cactus Punch, the first independent company to design embroidery specifically for the home market. Combining a degree in art, a life long love of sewing and crafts, and a background in programming, Lindee melds the art with the science of creating a smooth running and creative design. With 24 years of digitizing experience, she now owns and operates Lindee G Embroidery, providing quality embroidery designs and educational

products.

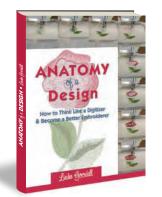
Lindee was an Impressions Magazine 1997 Digitizer of Distinction and won first place for Creative Use of Stock Designs as well as the overall Creativity Award in the 2002 Stitches Magazine Stitch-Off. She also won first place at METS in 1997 for best original digitized design.

She is the author of **Anatomy of a Design: How** to Think Like a Digitizer & Become a Better Embroiderer, the Learn to Digitize Series, and was a contributor to Embroidery Machine Essentials by Jeanine Twigg.

Lindee has given workshops and seminars on digitizing, embroidery techniques, and how to make money with embroidery. She has taught at numerous venues including: ISS Shows, Original Sewing & Quilt Expo, Creative Embroidery Conference, Houston Quilt Market, Viking, Pfaff, Singer, and Babylock Conventions, Brother Back to School, Sewing & Stitchery Expo, Martha's School of Art and Fashion, Sydney Arts and Crafts Show, and Echidna Convention.

Lindee has been a frequent guest on Martha's Sewing Room, America Sews, America Quilts, Quilting from the Heartland, and Quilting with Shar. She is also a Craftsy instructor with two classes in the embroidery category.

She has also written numerous articles on digitizing and embroidery techniques for Stitches Magazine, Profitable Embroiderer, Threads, Sew News, Creative Machine Embroidery, and Designs in Machine Embroidery.



Keep an eye on my YouTube channel. I may not be taping any new PBS shows but here I can do my own mini-segments!

How to Contact Lindee

Web: lindeegembroiderv.com

Facebook: facebook.com/lindee.goodall

YouTube: LindeeGVideos

Pinterest: pinterest.com/lindeeg/

Acknowledgements

o, this is not going to be long drawn out section. I could never name everyone who led me to and have kept me on this path and the risk here is that I'll leave out someone important.

Of course I have to start with my parents. My dad, Neil, was a chemical engineer and from him I get my analytical, perfectionist, and introverted side. My mother, Eleanor, taught me to sew and knit and donated her patience and sense of humor. Both of my parents were teachers, and according to my astrologer friend, Jo'Ann, I have that in my chart as well

My husband, Bill, has always seemed to go along with things I really want to do, from getting married in the shark tank at the Columbus Ohio Zoo to launching an embroidery business. He truly is my soul mate and I really could not have done any of this without his support. Just goes to show you never know who you'll meet on the bottom of a swimming pool!

The Universe will speak to you in odd ways and through many voices. Here's a partial list of key voices who guided me into embroidery and kept me there when the going got tough:

- Nancy Zieman, who through her PBS TV sewing show introduced me to new computerized sewing machines in 1991
- An unknown member of the Cincinnati Mac User's group who was selling a tiny embroidery machine (P.O.E.M) at a swap meet, which was my first introduction to an embroidery machine (1992)
- Connie Veely, whom I met at a computer show and announced she had a sewing machine that hooked to her Mac (1993)
- Beaches Sewing in Cincinnati, who had that machine (Pfaff 1475) and even though the owner knew nothing about computers, I bought it anyway (1993)
- Kaye Wood, who featured a guest on her PBS TV sewing show, Strip Quilting, who demonstrated creating an embroidery design on a Mac and then stitching it out, using (coincidentally?) the very same machine I saw at the Mac Users Group (1993)
- Margo Ankeny, a then Viking educator, who demonstrated the Huskygram at the Stitching Post in Dayton that clinched the deal to buy my first embroidery machine (1994)
- My former company, Optimum Group, who saw my extra-curricular hobby as a great addition to their promotions business and sub-contracted me to handle many projects that enhanced both of our businesses and ultimately provided the cash for me to invest in professional digitizing software and a 9-needle machine
- Walter Florianni, who complimented me on a vest with flowers I had digitized and told me I had talent back in 1995 when I was looking for professional embroidery software at the Bobbin Show in Atlanta
- Gary Walker, Echidna Sewing Products in Australia, with whom we've had a great business relationship since we met as vendors at a Viking Convention in 1996 and who continues to keep me on my
- Darin Andersen, founder of **Embroidery Central**, who invited me to sell my designs on his website and helped make us more widely known (1996)
- A Nancy's Weekend speaker coordinator who called the very day in 2011 when I was thinking I needed to do something else because I just wasn't making ends meet in this business anymore. How can you quit after that?

I could go on with an even longer list of people from whom I took classes and who continued to guide me. Some people are born knowing what their purpose in life is. Others have to be told over and over in order to find our path and stay on it. I guess I'm one of the latter!

About this eBook



ABOUT THIS EBOOK

f this is your first experience with an ebook, you might be wondering why I chose this format. Why not the traditional printed format?

When I released my first ebook in 2009, digital books were still pretty new. Now they're everywhere. It's even likely the manuals that came with your embroidery software are no longer printed.

First of all, ebooks save a lot of money-printing costs have skyrocketed and they continue to rise. A printed version would have cost you more both for the book and for shipping. Printing takes a lot of time; ebooks are available much sooner. Printing also consumes natural resources and contributes to pollution. Shipping is free on ebooks, costing you only a little bandwidth and can be received nearly instantaneously.

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It's always wise to check the name of the web site with the link you clicked to make sure the destination appears like a reasonable match. It is possible that an unscrupulous person could send you to an entirely dangerous site.

About this eBook

Note: I did try to define any terminology that might be unfamiliar to you. However, if you come across a term you don't know, check out the glossary in the Appendix section.

The table of contents is also live—just click on a chapter or topic and instantly you're there. The table of contents is also available as bookmarks in Acrobat. With the bookmarks panel open, you can instantly link to any section in the book. To see a bookmarks panel on the left side of this document, make the following menu selection in Acrobat: View > Navigation Panels > Bookmarks.

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Of course, you can still print the book for easy reference if you want to. Having the interactive digital version and the printed analog version gives you the best of both worlds!

If you do print, this book was designed to be printed duplexed in color. When printed this way, all the new chapters will start on the right hand page (odd-numbered page) as is customary with printed books. This means some chapters have a blank page at the end. I've titled this page "Notes" so you won't think that for some reason the page didn't print.

The book is still readable in black and white, it just won't be as pretty. In fact, I encourage you to print it out, store it in a notebook and make notes—you don't have to worry about "ruining" a book!

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Amazon has changed their policy about payments on Kindle books sold on their site and authors only get paid if someone actually reads it. You still have to pay for it whether you read it or not but I might not ever get paid. This books represents decades of learning and experience and I'd like to continue in this field for quite a while longer.

Other Random Bits



ABOUT THE LINKS

I've included links to products and related information throughout this book. Currently, these links go directly to the named item. However, they will all been changed to go to a page on my website where I can keep the links updated.

Products do get discontinued and new ones come along so it will mean an extra click for you to get to the product but you'll have the newest information that way.

When I teach a class, someone always asks, "Where can I get that?" So I've covered that base by linking.

If you're reading a printed version, just go to LindeeGEmbroidery. com/extras/book-extras.

If a link no longer works, please contact me so I can correct it in a revision. In the meantime, go to the site's main page and use the site's search tool to see if the item is still there.

DISCLOSURE

Another thing I need to disclose is that I have business relationships with a few of these companies. The products I recommend are ones I use and like. Why would I recommend something I didn't? Links leading to Embroidery.com, Embrilliance products, and Amazon are affiliate links, which means I get a small commission if you buy from one of the links.

It's important to support the small businesses in this industry as well. By all means visit your local dealer and keep them from disappearing.

Here's a list of the primary places you can find items listed in this book:

- LindeeGEmbroidery.com my site! Be sure to visit the blog, shop, and project gallery
- EchidnaClub.com.au Live down under? Here's the place to
- Embroidery.com my go-to place for embroidery supplies and accessories
- <u>Embrilliance.com</u> embroidery software
- Wilcom Hatch—embroidery software
- Amazon.com what can't you find here?

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Getting Started

PART 1: GETTING STARTED

s Jimi Hendrix sang, are you experienced? Even if you're a complete newbie with machine embroidery, you aren't a complete newbie as a human and you likely have other experiences that transfer—especially if you're already comfortable around a sewing machine or a computer.

In this short introductory part, I'll lay a few expectations, tell you how I got started with embroidery, and explain my big TOE (theory of embroidery) in terms of a recipe. I'll also clue you in to a big secret—there's no such thing as perfect embroidery. There is, however, quality embroidery, and I'll give you a definition so you can have some gauge by which to measure your projects. Then we'll spend the rest of the book dissecting the quality formula to understand what it means and covers.

Let's get started!

Getting Started



CHAPTER 1:

INTRODUCTION

In This Chapter:

- Where's your starting point?
- How to use this book
- What you should know

hile the title of this book might make you think that it's a collection of "recipes" for combining various designs, fabrics, threads, stabilizers, and such for virtually every variation you could think of, it's really more about understanding the "ingredients" so that you can have more successful results and fewer "bad" ones.

This book covers all the basics for stitching a quality embroidery design in great detail, most likely more than you want to read in one sitting. No matter what level embroiderer you are right now, you're sure to find some golden nuggets here.

I've often heard from an embroiderer that she wished she could know what I know. Until Vulcan mind melds become a reality, here's the next best thing.

ARE YOU EXPERIENCED?

- 1. Pre-Embroiderer—Have no embroidery experience. Maybe you just got your first machine or maybe you've never unboxed and used the embroidery unit. Or, maybe you're still looking for your perfect machine. The good news here is that you have no bad habits yet.
- 2. Introductory/Novice—Just learning your machine and/or embroidery. Has completed a machine intro course or equivalent.
- 3. Beginner—Has some experience with machine embroidery, is comfortable with machine functions.
- 4. Intermediate—Has been embroidering for a while on a regular basis and has a moderate depth and breadth on machine functions and embroidery techniques.
- **5.** Advanced—Has proven skills and knowledge on the subject domain. Could support the master level in teaching to large

6. Master—Competent to provide mentorship and guidance within a master/apprentice type model as well as teach the subject to larger groups.

Notice I didn't place time frames to determine what point you become "intermediate" or "advanced." Time means nothing; experience is what counts. If you only embroider a random project here and there a couple of times a year, you probably have to figure out how to use your machine all over again. In that case, you're still a novice.

"Embroidery experience" also doesn't mean that if you've stitched the same design on 100 shirts, one after the other, that you've gained a lot of experience with your machine or selecting stabilizers or designs. On the other hand, assuming you were practicing good hooping techniques, you've probably become more efficient at accurate hooping.

In his 2008 book, Outliers, Malcolm Gladwell wrote that "ten thousand hours is the magic number of greatness." He was talking about 10,000 hours of deliberate practice, not just doodling around. I'm not saying that you'll need 10,000 hours to be great at embroidery (or digitizing) or that putting in 10,000 hours will guarantee greatness.

I'm never going to be a great singer no many how many hours I put in. The point is that learning anything requires an investment of time and to stay proficient, you have to keep up some minimal level of commitment. Furthermore, that learning time must be active—not just a repetition of the same old thing.

It's really like going to the gym to workout your body. Your muscles will soon adapt to a given routine and you'll no longer experience any gains unless you do something new. You have to change it up with different exercises, movements, and resistance. And if you guit, well, you regress back into a blob of mush. Your brain is similar.

On the plus side, Gladwell talks about junior league hockey players. Players are teamed up based on their birthdays. Those whose birthdays fall at the beginning of the range are older and generally bigger and more coordinated than those at the end of the range. That's especially true for kids.

What does this mean for you? Just because you're older, doesn't mean you can't learn to embroider. OK, so that's my interpretation, not Gladwell's! But if you can read this book and have the physical capabilities to hoop and operate the machine, I see no reason why you can't learn to do embroidery.

Sometimes I make videos of techniques I learn. That helps me focus on the process and if I haven't done it in a while and forget, I can always go back and watch.

Getting Started So how long will it take you that answer to many quest



So how long will it take you? That depends. By the way, I give that answer to many questions involving embroidery—you'll see it many times in this book—but there are so many variables involved!

It depends on any related previous experience you might have. If you've never used a sewing machine before, that's something entirely new. It didn't take my husband long at all to master the multi-needle although it scared the heck out of me to watch him knowing how much the darn thing cost.

It depends on how you think. Young people often learn faster simply because they have no fear of messing up or breaking things. Those a little older might learn faster because they are better able to focus. Still older people might be able to learn quickly because they have vast life experiences that can help.

No matter how old or young you are, if you're afraid of messing up or breaking something or think you can't learn, you're just creating a self-fulfilling prophecy. Instead, look at it as an adventure and don't try to learn it all at once. You can't.

"Whether you think you can, or you think you can'tyou're right."— Henry Ford

Did I "learn" embroidery by reading the manual and then stitching out one of the designs that came with my first machine? At what point could I say I learned embroidery? I'm still learning and that's why I still do it.

Last summer I got an entirely different embroidery digitizing program that required me to use Windows-not an easy thing for a Mac person. I downloaded the manual to my iPad and read the entire thing through.

Did I learn the software by doing that? HA! No way! But I did learn about the capabilities of the software and, because of previous experience, was able to see how I could use them. Then I started making little designs that focused on using a particular feature, stitching each one out and watching every stitch sew.

Again and again, I went back to the manual to understand a particular feature, play with it until I could do it with ease and then make something to see how it stitched. I also searched YouTube for videos on whatever it was I was doing. I did this most every day for at least a few hours and within a couple of weeks, I was getting a pretty good handle on things.

Am I "pro" at this software? No, but I'm pretty comfortable with it. And here's the real thing... Several of my industry friends had been "nagging" me for years to use this program and I wouldn't. Why? Because it would have totally knocked out my productivity while I learned it, not to mention I had to use Windows.

I finally gave in and figured I'd give it a really thorough go using the 30-day free trial simply so I could say, "OK, I tried it and I don't like it so you can guit bugging me." But what happened is, I really, really liked it!

What was it? Wilcom Hatch.

When you get your embroidery machine, be a kid on Christmas morning or your birthday with a new toy. Be fascinated. Read the manual, find all the buttons on the machine and know what they do. Load a design and sew it out.

Then be sure to keep it up so instead of learning what you forgot since the last time, you are expanding your base. 10,000 hours of relearning what you forgot doesn't get you very far.

Put yourself in "play mode" not "production mode." You'll have way more fun and learn a lot faster that way with way less stress.

Who This Book Is For

This is the book I wish I had before I got my first embroidery machine, or at least after. I truly didn't know what I didn't know.

Back then, there were so few choices on machines and software especially in the home market—nor as many thread and stabilizer choices as we have today so if we sent this book back in time, many sections would just vanish.

I was clueless and more or less working in a vacuum. Today we have the opposite—information overload and practically bombarding us. It can be difficult to separate the wheat from the chaff (so says someone who doesn't eat grains). This is my attempt to consolidate what you need to get started and move forward.

If you're a pre-embroiderer or a novice embroiderer, don't let the content overwhelm you. If you have a business and need to train a new employee, this book can make a great reference.





If your machine only came with red, yellow and blue, then you can do what I did and stitch a yellow cat with red stripes and blue eyes.

If you're more advanced, you ing because someone star



If you're more advanced, you may find you need to a little unlearning because someone started you off on the wrong foot. Don't hold on to the way you were taught as the one and only way; do try new things. I was given a lot of bad information when I started but I replaced that with better methods as I discovered them.

Think of this book like the manual that came with your machine. You don't have to comprehend the entire thing to get started. Just start and then refer back to the manual as needed. I just happen to be one of those people who reads an entire manual or reference book. This isn't a novel where you might miss out if you skip around.

An embroidery machine is an embroidery machine for the most part. Whether you have a tiny, single needle machine or a multineedle multi-head monster, techniques and procedures are pretty much the same.

From time to time, I talk about "production embroidery" and how to be more efficient. You may think this doesn't apply to you if you're only stitching a single item now and then. I really don't know anyone who couldn't use a little more time. Are you any different?

How To Use This Book

This book is digital only; there is no printed version unless of course you choose to print it out yourself. I happen to like digital books. It means I can carry around an entire library on my iPad and read just about anywhere. So save a tree and keep it digital.

PDF books like this and my previous one, **Anatomy of a Design:** How to Think Like a Digitizer and Become a Better Embroiderer, are very easy to search. You can type in your search phrase and find every time it's used. Hot links in the book make it easy to go to auxiliary content with just a click or touch.

This book is really a reference guide; you do not have to read it cover to cover. Just read the parts you need when you need them.

Please note that I will be referring you to **blog posts** and **You-**Tube videos from time to time. Sometimes it's just easier to watch something than read about it. The blog posts may be continuations or side jaunts to a topic and are meant to keep the book from becoming too large.

In an earlier book, I embedded short videos. Unfortunately, Windows has dropped support for that and digital devices won't play them. Technology has changed since 2009, so there will be links to YouTube videos instead. Of course, that has a different downside—you will need a connection to the internet.

WHAT I EXPECT YOU TO ALREADY KNOW

This book is not about how to operate your machine. You already have a manual for that so use it. If you don't know how something works on your machine, that is a dealer question. Or, better yet, ask YouTube. There's probably a video out there somewhere with someone demonstrating the exact thing you need.

It doesn't matter if you have a tiny, single needle "home" machine or a large multi-needle machine, you still need to know a few things to get started:

- 1. How to turn the machine on/off.
- 2. How to put the machine into "embroidery mode" if it's not a dedicated embroidery machine. This step may require attaching a module, changing the presser foot, and other adjustments.
- 3. How to thread the machine, both needle and bobbin.
- 4. How to change the needle.
- 5. How to load a design into the machine, select it, and place it.
- 6. How to attach the hoop.
- 7. How to start and stop the design.
- 8. How to back up if you need to restitch an area.
- How to rotate and mirror design.
- **10.** How to reposition a design in the hoop.
- **11.** How to "trace" the design for placement.
- **12.** Any other features your machine offers that relate to stitching an embroidery design.
- **13.** How to use the built-in help.
- **14.** How to adjust thread tensions.

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Retting Started No Excuses! Don't use "I haven't had a



Don't use "I haven't had a class yet" as an excuse not to jump in and try things. You don't need a permit to operate the machine and you don't need to know all the functions to start. It's entirely possible you will never need to know all the functions.

As long as you don't stick your fingers under the needle, your machine won't bite! And it's unlikely that you'll break your machine doing normal functions although you can break a needle or even the hoop.

You will continue to learn things about your machine as you do more embroidery. You'll learn what threads it prefers, you'll learn how to manage the tensions better. You'll learn how thick you can layer things before it starts having problems (layering multiple pieces is important for in-the-hoop projects).

If you don't yet have a machine, there is a chapter in the last part with some tips on selecting one. Don't contact me and ask "which one is best" because they are all pretty much "best" at something. Some might be best (lowest) price and another might be best at some other thing. Also, because companies are always coming out with new machines—both top of the line and midline, those "bests" can change.

Same goes for software. I'll tell you what I use and like but I don't review all brands of software or machines. I can't afford to buy all that stuff and I don't make any money doing that.

WHAT ABOUT COMPUTER SAVVY?

To even be reading this book, you must have some! How much more you'll need depends on what software you're using. A basic set of requirements would include:

- Having an internet connection to access peripheral material
- Knowing how to download and unzip designs
- Knowing how to transfer designs from your computer to your machine
- Knowing how to install and use any software you need or have chosen to add

CHAPTER 3:

THE EMBROIDERY RECIPE

In This Chapter:

- · Why embroidery is liking making cookies
- · Why perfect embroidery is myth
- The definition of quality embroidery

ou've just bought a brand new, computerized embroidery machine and can't wait to start churning out great looking projects. Every surface you spy seems just the ideal place to put a beautiful design: your kitchen towels, the bath mat, your new sweater and skirt, your daughter's jeans, your husband's golf jacket, the cat...well, not the cat.

You gather your family or friends around to watch your amazing new acquisition so they can see how cool and easy it is. In your glee, you punch up a nice design on the machine, grab a tee-shirt that is getting past its prime and stick it into the hoop, thread the machine with a color you like, and without reading a thing, you start the machine.

Within moments you notice something is not quite right. The machine is actually eating your shirt right into that tiny hole in the throat plate! Everyone looks at you and someone pipes up, "You paid how much to make holes in clothes? Wouldn't scissors be cheaper?"

What went wrong? The dealer made it look so easy! After all, your machine is so smart, it's almost as smart as your computer. In fact, it has a computer in it. This should be automatic, right? Not even!

Your machine is no smarter than your oven, your car, or your dishwasher, all of which have computers in them. Expecting to get good results from an embroidery machine without planning is just rolling the dice and hoping to get lucky!

"Prior planning prevents poor performance." -An army saying

Everything is getting "smarter" but there's a common saying among computer programmers, "Garbage in, garbage out." Whether you're baking cookies or stitching embroidery, you need quality ingredients and proper technique.

I almost can't make those remarks about appliances and cars not being that smart. We now have self-driving cars and fridges that can tell you when voure getting low on certain foods. Also, some machines can stitch a perfectly even seam along a curvy edge all by itself and can straighten a design in the hoop for you.

Getting Started



An embroidery machine is a tool—fancy, high tech, and well made—but still a tool. It can do lots of things for you, but thinking isn't one of them.

So what to do? You don't have time or energy to invest in an advanced degree in Fashion and Design, nor in Materials Science, or anything else.

Well, you don't have to go to cooking school to bake cookies; you find a recipe. There you'll get the guidance to combine the right amounts of all the correct ingredients and along with the proper steps to get perfect cookies.

While we don't really have actual "recipes" for good embroidery, there are guidelines for good choices and combinations, and that's what this book is about.

Just as cookies are made of a thickening agent, a shortening, a sweetener, and flavoring accents, every embroidery project is made up of essentially the same ingredients: an item to be embroidered, a design, stabilizing agents, and some thread.

Cookies have to be mixed and baked. Embroidery has to be hooped and sewn. Cookies can be ruined if over beaten, baked too long or too short, baked at the wrong temperature, or on the wrong type of baking sheet. If the ingredients are improperly measured or substitutions are made, results will vary.

An improperly hooped or backed garment (or an unwise design choice) can result in a puckered garment. Most designs are digitized for 40-weight embroidery (rayon or polyester) thread. Metallic threads are not necessarily a substitutable thread and may not run well in a particular situation.

The wrong needle may cause excessive thread shredding or fabric damage. Improperly set tensions on your sewing machine can cause the bobbin thread to pull to the top or a very tight look even causing puckering—to the embroidery.

Just as how you place the cookie dough on the baking sheet affects how they turn out, so can design placement. If a glob of cookie dough is dropped too close to the edge of the sheet, it will run off during baking. If cookies are placed too closely together, their edges will bake together.

Placement also affects embroidery. After all, what is the first thing you really notice about a design? It's whether it's properly oriented and positioned on the garment.



Is that really where you want the eye to go?

Size impacts cookies and embroidery. If you make extra large cookies, you will need to adjust the baking temperature or timeor eat the cookie center with a spoon. Enlarged or larger designs impact the fabric more and require different stabilizers.

Keep in mind I'm not telling you not to experiment. If cookie bakers never experimented, we'd never have so many tempting cookie recipes! However, do learn the basics before you begin experimenting and simulate the environment as much as possible before attempting your combination on the real thing.

Your first solo embroidery experience may have been more successful than the one I illustrated here but at some point you will have a problem. We all do.

How do you think I learned all this? By making a lot of mistakes and figuring out what caused them and how to avoid them.

Mistakes are "learning experiences" and if you view them as such, you'll be less upset. Remind yourself that "mistake" is a just a word, not a sentence!

You could have the perfect design, the most wonderful fabric, the most luscious threads, and the latest and greatest high-tech machine and still have a bad result. All the ingredients on their own might be amazing but that doesn't mean they will play nice with each other when combined under the needle.

It can be like that old Clint Eastwood movie where Dirty Harry is pointing the gun at the punk and says, "Do you feel lucky?" Well, do ya?

We may not be aiming a gun at the hoop but we're pointing a needle at some fabric and hoping we get lucky. If you don't think a needle is a lethal weapon, try sewing though your finger. Seriously, though, if you try to embroider a worn garment, the needle can cause quite a bit of damage.

The problem with embroidery of course is there are no real "recipes" to follow nor will this book provide you with specific "recipes" for embroidery—there are simply too many variables. Instead, we'll look at the various "ingredients" and understand how they work so that we can make better choices.

AN EMBROIDERY RECIPE?

So no, there's no real "embroidery recipe." This is just something I made up to give us an idea of what goes into making an embroidery design and it does make sense. Like a great cookie, great

OK, disclaimer here. Although I use a lot of cooking analogies. I am not the family cook: my husband has taken over that job. Nor am I a big fan of cooking shows, but I do love Alton Brown and how he explains why certain techniques and ingredients create various results. I even bought his cookbook just to read it.

I want this book to perform the same function for embroiderers who want to understand the "why" of embroidery. The more you understand about the basic ingredients and techniques, the better choices you can make in the kitchen or in your sewing room. I just use cooking analogies because most people can relate to them and how they work, at least to some degree.

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Photo by Andy Chilton on Unsplash

embroidery is the result of using quality ingredients, in the correct amount, with appropriate utensils and using the proper technique. Substituting potatoes for apples is not a good idea!

If that sounds a bit ridiculous, let me explain. Years ago, when I was married to my first husband, his mother was not renowned for her cooking. In fact, the first time I ever ate there, every dish he passed me was accompanied by a cautionary whisper of, "Don't eat this."

One time for a holiday meal she was fixing apple pies and ran out of apples. So she looked around the kitchen and saw the potatoes on the counter and thought, "They're white, they're crispy, and no one will ever know." White and crisp they may be when raw but boy was she wrong about the last part of that sentence! You may be able to fake people out with Ritz crackers in a mock apple pie but not with potatoes!

My imaginary embroidery recipe looks like this:

Embroidery Recipe



EOUIPMENT:

Machine, needles, hoop

INGREDIENTS:

☐ Fabric ☐ Backing □ Design ☐ Topping ☐ Thread ☐ Adhesives

PREPARATION TIME: Longer than you think!

COOKING TIME:

Stitch count * machine speed + color changes



INSTRUCTIONS:

Making sure design is compatible with fabric, hoop using appropriate hooping techniques in desired fabric location with appropriate backings, toppings, and adhesives. Season with threads as desired. Set machine tensions carefully to avoid burning. Sew until done in properly maintained machine. Trim threads. Remove from hoop promptly. Discard backing. Serve with pride and joy.

As you can see, it's pretty generalized.

EQUIPMENT

Just as you need mixing bowls, cookie sheets and an oven to bake cookies, you'll need to "mix" your fabric and stabilizer(s) in a hoop and "bake" them in your embroidery machine. You'll need to pay attention to machine settings like speed and tension so your project doesn't end up as burnt toast.

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Preparation & Cooking Time

One of my machines displays the stitching time a design will take. It assumes I'll be stitching at top speed (I don't and I'll tell you why later on) and I'm not sure it takes into consideration the time it takes to change threads.

It definitely doesn't account for the time it took to plan the project, prepare the item, get it hooped accurately, and load the design into the machine. Nor does it factor in any finishing time like trimming threads and removing stabilizer. And what if I break a thread? Prep time can easily take longer than the actual stitching time.

Some projects will require more finishing time. For example, if you're embroidering free standing lace, you'll need to allow time for removing the stabilizer and drying. Some projects need more interaction during the stitching process. Appliqués and in-thehoop projects are prime examples.

When the machine calculates sewing time, it's basically calculating total stitch count divided by machine speed, which is always less than the time between pressing the start button and when the design finishes. Always allow plenty of time to stitch your project! When you're rushing, that's when mistakes happen.

NGREDIENTS

As you'll find out (if you haven't already...) you can't just put any design on any fabric and expect them to look great together. You're essentially making a marriage here that's more binding until "death do us part" because embroidery is pretty much like a permanent tattoo.

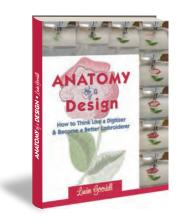
These are the general ingredients that go into most designs with toppings and adhesives optional. This book is about those ingredients and how to combine them successfully. We won't be going too much into the designs themselves; I've covered that in my previous book, Anatomy of a Design: How to Think Like a Digitizer and Become a Better Embroiderer.

INSTRUCTIONS

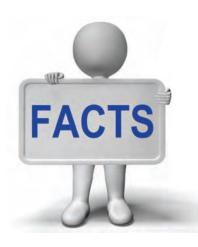
"Making sure design is compatible with fabric, hoop using appropriate hooping techniques in desired fabric location with appropriate backings, toppings, and adhesives. Season with threads as desired. Set machine tensions carefully to avoid burning. Sew until done in properly maintained machine. Trim threads. Remove from hoop promptly. Discard backing. Serve with pride and joy."



It's never a good idea to start a project when you are stressed and pressed for time. Yes, I know life today is often hectic and we're often working under pressure and deadlines (often self-imposed). I used to pull allnighters too, finishing "just one more sample" before a big event or class. No one would've missed that sample if I didn't have it.



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That pretty much sums it up! Now we just need to learn how to tailor that recipe for your project.

PERFECT EMBROIDERY IS A MYTH!

Let's just get this out of the way right now. If you are a perfectionist and expect every stitch to be perfectly placed every single time, you probably won't be happy with your results.

Why is perfect embroidery a myth?

- Fabric distorts
- Needle and bobbin threads create tension on fabric
- The needle can be deflected by previous stitches, fabric itself, or by tension jerks on the thread
- The thread may occasionally loop even under the most ideal situations

The truth is that good embroidery is much more than a well-digitized design. Even if you're sewing the same design multiple times with the "exact same conditions and technique," each one will have subtle differences and flaws; each one is unique. These are what I call "the embroidery facts of life."

So yes, your design was created on a computer and the file you used to stitch each item was identical and you're stitching with a precision machine but you're stitching on what is essentially a moving target. Expect each one to have subtle differences. Even identical twins have differences!

As each stitch is made, the needle and bobbin threads pull the stitch secure. Those machine tensions combined with fabrics that aren't perfectly stable will cause some fabric distortion. The more stitches that are sewn and the more layers that are sewn and the more stitch directions in the design, the more distortion you can get. (Keep this in mind for later when I talk about why you should avoid color-sorting.)

Just because we can't get an absolutely perfect stitch-out every time doesn't mean we can't consistently produce quality embroiderv. So let's define that next.

Pon't feel as if you have no control. Bad embroidery seldom "just happens." This type of thinking is victim mentality, holding on to the excuse that you're a victim, blaming others (usually the digitizer and the machine) for a bad result.

Yes, there may be some things you can't control—how the design was digitized, how your machine handles varying stitch lengths, how your hoop holds fabric. It's up to you to know a few things so that you can make educated decisions. The important thing is to recognize you are not blindly throwing darts in the dark.

DEFINING QUALITY EMBROIDERY

So if perfect embroidery is a myth, then how do we define quality embroidery?

Quality embroidery is more than just a good embroidery design. Quality embroidery is like a choice gourmet cookie or a finely choreographed dance. It results from a precise interaction of key ingredients:

- A well-prepared design that is well-suited to the fabric and item being embroidered
- A properly maintained and tuned machine using the correct needle for the thread and fabric
- The right thread for the job—both top and bobbin
- An item suitable for embroidery that is smoothly hooped at the right position in the right size hoop with the hoop properly tensioned, the right topping (if required), and the right backing

I can't claim credit for that definition; it's adapted from a definition given in a class I took over 20 years ago with Ruth Guenther, who is now retired.

Mastering all the techniques implied by that definition of quality embroidery takes time, experimentation, patience, practice, and persistence. We'll spend the rest of the book discussing each of these bullet points, learning how to control them, and how they affect our results.

ABOUT THE DESIGNS WITH THIS BOOK

This ebook comes with a small set of test designs. The purpose is for you to try out quick sewing designs on a variety of fabrics along with different stabilizers and threads.

You'll notice that most of them are the same little flower design just digitized in different styles. Unless digitizing for a specific client, a digitizer is free to interpret the design in many ways; we're not limited to an exact reproduction of the image and in many cases, that's not possible or advisable.

These designs are all "well digitized" but they may violate the first principal of being well-suited to your the fabric and item. They're intentionally small and basic so that they can stitch relatively quickly on the most basic of machines with only a few colors. They're not meant to be amazingly beautiful or intricate; they're testing designs so you can see how your machine reacts with the

Some of these flowers are digitized for specific techniques that aren't covered in this book, such as lace, appliqué, and 30 designs. If you aren't familiar with these techniques, please check my blog or YouTube channel for more details.

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different threads, different tension settings, and all the other variations available. They also make it easy to learn a new technique with a minimum of time, materials, and effort.

When you watch how they stitch under various conditions, you'll have a better idea for choosing designs for real projects.

Successful Outcomes Result From Choice Not CHANCE

Successful results are a matter of making the right choices and using the correct methods. While it's true we don't have absolute total control—bad things can still happen—great results aren't just a matter of luck. There will always be slight variations even when doing a production run of the same design on the same kind of garment on the same machine on the same day by the same person.

As Walter Florianni put it:

"Embroidery is an art form of distortion and each sample is an individual."

Understanding a few basics can take you a long way toward making smart selections. Track your results—not only what works well, but those that are marginal or worse. By understanding how various design components affect different fabrics and learning the characteristics of a diverse range of stabilizers, you will not have to rely on a trial and error approach—which is the slow learning method indeed! This was how I taught myself embroidery before I found any teachers.

"You must learn from the mistakes of others. You can't possibly live long enough to make them all yourself."— Samuel Levenson

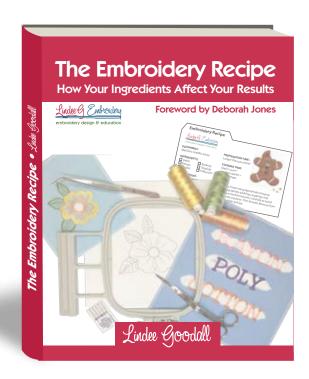
I'm one of those kind of people who wants to know the how and why. Yes, I do have a tendency to turn things I'm interested in into science projects!

I've summarized the key points at the beginning of each section so you can get the gist without all the gory details if that's your preference. Later, if you're experiencing a problem or want to experiment, you can come back and it will be there for you.



Successful result matter of choice and method—not chance!

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The Embroidery Recipe: How Your Ingredients Affect Your Results